From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 18:22:57 1994
Date: Thu, 8 Dec 94 19:28:29 GMT
From: "Hugh D. Stegman" <driver8@red-eft.la.ca.us>
Message-Id: <9412081928.AA14834@red-eft.la.ca.us>
Subject: Re: "Good Times"

>we've been had.

I *do* love paranoia viruses. However, apparently there *is* a capacity on BITNET to execute programs in e-mail, and maybe this is where some of this starts.

According to one of the many warnings now spreading virus-like across the net, "Good Times" actually contains a chain letter, and the warning thereof was started to keep well meaning people from spreading what some saw as junk to exponentially expanding numbers of hosts. Of course, now the warning, and the warning on the warning, etc asymptotic at infinity are spreading farther and wider than "Good Times" ever would have.

I humbly note that I have propagated a goodly number of messages on this subject myself, including a pretty funny "communique" that explains paranoia viruses quite nicely. I'd pass it along here, except that I like using the bandwidth for discussion of old radios. At the rate it's reproducing, it may be the best textfile virus of all.

I had better stop this. I'm getting dizzy.

Hugh NV6H

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 21:07:13 1994
Message-Id: <MAILQUEUE-101.941208164315.448@vilas.uwex.edu>
From: "Terry O'Laughlin, RM:7135, #:6-6667" <OLAUGHLIN@vilas.uwex.edu>
Date: Thu, 8 Dec 1994 16:43:15 CDT
Subject: 12/04/94 Mil List

This is an ongoing project. Any and all are invited to contribute.

Please hold off on typing new entries until I get a new submission guide written. There have been numerous formatting headaches due to the various mail programs we all use and the ASCII>WordPerfect>ASCII conversions involved in the editing. I should get the new guide out next week. I'd also appreciate feedback on the list. I don't know how it looks after it gets bitcrunched and packetted into a dozen different mail packages.

Thanks this week again to Mike Crestohl for entries. A big thanks to Kevin Anderson for a major block of new entries. Thanks to Tom Adams, Emil Kasprzyk, Takashi Maeba and Don Merz for additional information.

Military Equipment List ----------------------------------- 12-04-94

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--------------------------------------------------------------------
The Joint Electronics Type Designation                             l
--------------------------------------                             l
e.g. AN/FRR-59A                                                    l
                                                                   l
AN  -  indicates "system"                                          l
/                                                                  l
F   -  installation                                                l
R   -  type of equipment                                           l
R   -  purpose                                                     l
-                                                                  l
59  -  model number                                                l
A   -  modification letter                                         l
--------------------------------------------------------------------
installation                     l    type of equipment            l
------------                     l    -----------------            l
A  -  airborne                   l    A  -  invisible light, heat  l
B  -  underwater                 l            radiation            l
C  -  air transportable          l    B  -  pigeon                 l
D  -  pilotless carrier          l    C  -  carrier                l
F  -  fixed                      l    D  -  radiac                 l
G  -  ground, general            l    E  -  nupac                  l
K  -  amphibious                 l    F  -  photographic           l
M  -  ground, mobile             l    G  -  telegraph or           l
P  -  pack, portable             l            teletypewriter       l
S  -  water surface craft, ship  l    I  -  interphone and PA      l
T  -  ground, transportable      l    J  -  electromechanical      l
U  -  general, utility           l    K  -  telemetering           l
V  -  ground, vehicular          l    L  -  countermeasures        l
W  -  water, surface             l    M  -  meteorological         l
       and underwater            l    N  -  sound in air           l
                                 l    P  -  radar                  l
---------------------------------l    Q  -  sonar                  l
purpose                          l    R  -  radio                  l
-------                          l    S  -  special types          l
A  -  auxiliary assemblies       l    T  -  telephone (wire)       l
B  -  bombing                    l    V  -  visual                 l
C  -  communications             l                                 l
D  -  direction finding          l---------------------------------l
E  -  ejection release                                             l
G  -  fire control                                                 l
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H  -  recording                                                    l
L  -  searchlight control                                          l
M  -  maintenance and test assemblies                              l
N  -  navigation aids                                              l
P  -  reproducing                                                  l
Q  -  special or combination of purposes                           l
R  -  receiving                                                    l
S  -  detecting range bearing                                      l
T  -  transmitting                                                 l
W  -  control                                                      l
                                                                   l
-------------------------------------------------------------------l
Thus an AN/FRR-59A is:  system, Fixed Radio Receiver, model no. 59 l
                                -     -     -                      l
                                                                   l
This system is common, but not universal.                          l
-------------------------------------------------------------------l
A note on contract numbers:  The office where the contract was     l
issued and the date of issuance is embedded in the contract number.l
                                                                   l
Thus contract 14214-PH-51 (an important Collins contract) was      l
issued in Philadelphia in 1951.  Equipment was often manufactured  l
the same year (14214-PH-51 is a notable exception.  See "Electric  l
Radio", #27 for further information).                              l
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Designation	Description
AM-3924	Linear power amp, HF, 1kW, used with AN/FRC-93 and AN/GRC-122 sets
AM-6155/GRT-22	Linear power amp, 225-400mHz, 50w (conservative) 10w in, Eimac X165Z final, extensive metering, can be converted to 116-150mHz, rack mount 7" high, 80 lbs, ITT (model 3212)
AN/ARC-5	"Command Set" WWII airborne receiver and transmitter sets used in various combinations, also known as "liason sets" given their common usage, describes the following possible units (see individual entries): R-23/BC-453/CBY-46129 Receiver, 190-550kHz R-24/BC-946/CBY-46145 Receiver, 520-1500kHz R-25/BC-???/CBY-46104 Receiver, 1.5-3.0mHz R-26/BC-454/CBY-46105 Receiver, 3.0-6.0mHz R-27/BC-455/CBY-46106 Receiver, 6.0-9.1mHz

	T-19/BC-457/CBY-52209 Transmitter, 3.0-4.0mHz T-22/BC-459/CBY-52211 Transmitter, 7.0-9.1mHz
	MD-7 AM Speech Modulator
	The AN/ARC-5 system uses R- and T- designations. The BC- numbers are used in Signal Corps SCR-274N sets. The CBY- numbers are used in the Navy ATA/ARA/RAV/RBD sets.
	Receivers all use the same 6-tube superhet design: r.f. amplifier (12SK7), converter (12K8), two i.f. stages (two 12SK7's, or 12SK7/12SF7), detector and two audio stages (12SR7, 12A6)
	Transmitters use four tubes: 1626 oscillator, two 1625 finals, and 1629 magic-eye tuning. All have internal VFO and 28VDC dynamotor.
AN/ARC-44	Transceiver, 24-52mHz, FM, aircraft use, major component RT-294B, replaced by AN/ARC-54
AN/ARC-45	Tranceiver, 225-400mHz, 1750 chan, AM, 1w, 150, 28, and 300VDC, major component RT-295, replaces the AN/ARC-60
AN/ARC-51BX	Transceiver, 225-400 mHz, 50Hz spacing, AM, aircraft use, 16w, 28VDC (inverted to 115VAC 400Hz) major component RT-742, another version is the AN/ARC-51A which has RT-702 as major component
AN/ARC-54	Transceiver, 30-40mHz, 50Hz spacing, FM, 10w, 28VDC, major component: RT-348, replaced by AN/ARC-131
AN/ARC-55	Transceiver, UHF, AM, major component: RT-349, RT-349A, or RT-349B, replaced by AN/ARC-51BX and AN/ARC-51X
AN/ARC-60A	Transceiver, 228-258mHz, AM, 28VDC, major components: R-508 and CV-431, replaced by AN/ARC-45
AN/ARC-73	Transceiver, 116-150mHz, 680 chan, 80 preset, AM, 20w, 28VDC, major components: T-879, R-1123 and C-4074
AN/ARC-102	Transceiver, 2-30mHz, 1kHz spacing, AM/SSB,

	100w AM, 400w PEP SSB, major components: RT-698 and C-4390, replaces the AN/ARC-59
AN/ARC-114A	Transceiver, 30-76mHz, FM, 920 chan, guards 40.50mHz, 1 or 10w, 28VDC, 7lbs, components vary with aircraft
AN/ARC-115	Transceiver, 116-150mHz, AM, 1360 chan, guards 121.5mHz, 10w, 28VDC, 7lbs
AN/ARC-116	Transceiver, 225-400mHz, AM, 3500 chan, 10w, 28VDC, 8lbs, helicopter use
AN/ARC-131	Transceiver, 30-76mHz, 920 chan, FM, 1 or 10w 28VDC, 30lbs, major components: RT-823 and C-7088, replaces AN/ARC-54
AN/ARC-134B	Transceiver, 116-150mHz, 860 chan, 50kHz spacing; 1360 chan in -A version), AM, 25-40w, 28VDC, 20lbs, major components: RT-857 and C-7197
AN/ARC-164(v)	Transceiver, 225-400mHz, 25kHz spacing, AM, 1-10w, 18, 24 or 28VDC, major component: RT-1167
AN/ARC-515R-1	Transceiver/navigation receiver, VHF, AM, major component: RT-514R-1, used in T-41B aircraft
AN/ARC-524A	Transceiver, 118-140mHz, AM, 360 chan, 15w, 28VDC, used in TH-55A aircraft
AN/ART-13	Transmitter, HF, AM/CW/MCW, major component: T-47/ART-13, post-WWII to Korean War
AN/ASC-15	Radio set, groups three AN/ARC-131 for helicopter use in forward areas
AN/FRC-93	Radio set, Special Forces/USACC/field artillery, HF, SSB, 1kW (PEP) with AM-3979 linear amplifier, other major component: RT-718 transceiver, Collins Radio
AN/FRR-59	Receiver, 2-32mHz, four bands, mechanical digital dial, USB/LSB/ISB/AM/CW, 7&9 pin tubes, triple-conversion: 1625-1725/220/80kHz, 25.25h X 22"w X 24"d, 300 lbs, National Radio
AN/GRC-10	Radio set, National Guard/Army Reserve, VHF, FM, major components: T-235 and R-125

AN/GRC-19	Radio set, National Guard/Army Reserve, HF, AM/CW, medium power, major components: T-195 and R-392
AN/GRC-26D	Radio set, National Guard/Army Reserve, HF, RTTY, high-power shelter-mounted station for mobile, fixed or semifixed operation, major components: T-368 and R-390, replaced by AN/GRC-122
AN/GRC-41	Radio set, HF, CW/AM in half- or full-duplex operation, for mobile, fixed, or semi-fixed use, major components: T-368C and R-390
AN/GRC-46	Radio set, National Guard/Army Reserve, HF, AM/RTTY, transmits 1.5-20mHz, receives 0.5-32 mHz, 100w, 28VDC, AN/VRC-29 is equivalent, replaced by AN/GRC-142, shelter mounted
AN/GRC-50	Radio set, UHF, FM, transportable, major components: T-893 and R-1331
AN/GRC-87	Manpack transceiver, HF, AM, low-power, similar to mobile AN/VRC-34 set, major component: RT-77/GRC-9
AN/GRC-103	Radio set, UHF, FM, compact, 24 telephone channels when used with multiplex equipment, major components T-983 and R-1329
AN/GRC-106	Radio set, HF, SSB, mobile use (but also fixed or semi-fixed), major component: RT-662, replaces AN/GRC-19, variant set AN/ARC-106A uses RT-834
AN/GRC-109	Radio Set, Special Forces, 3-22MHz, CW, consists of: T-784/GRC-109 transmitter, R-1004/GRC-109 receiver, PP-2685 AC power supply, PP-2684 AC/DC power supply. See RS-1 and individual entries.
AN/GRC-122	Radio set, HF, AM/SSB/RTTY, vehicular, part of a family of sets including AN/GRC-142, AN/VSC-2, and AN/VSC-3, replaced AN/GRC-26D for Division HQ use, major components two RT-662's and AM-3924
AN/GRC-125	Radio set, 30-76mHz, FM, for vehicular, manpack, or fixed use, major component RT-505, 1-2w
AN/GRC-142	Radio set, similar to AN/GRC-122 except just one RT-662, replaces AN/GRC-46
AN/GRC-143	Radio set, 4.4-5.0gHz, FM, tropospheric/diffractive

	scatter mode of operation, major components: T-961 and R-1287
AN/GRC-144	Radio set, 4.4-5.0gHz, FM, general purpose, major components: T-1054 and R-1467
AN/GRC-160	Radio set, AN/PRC-77 variant, 30-76mHz, 920 chan, 50kHz spacing, FM, major component: RT-841
AN/GRC-163	Radio set, Point-to-point infantry communications, VHF, FM, major components modified RT-442 and RT-524
AN/GSQ-151	Seismic detection radio, major component: RC-3A
AN/MRC-102	Radio set, variant of AN/GRC-50, major components: two AN/GRC-50 sets
AN/MRC-103	Radio set, variant of AN/GRC-50, major components: three AN/GRC-50 sets
AN/MRR-8	Radio set, HF, RTTY, air/mobile transportable shelter, major components: R-390/URR receiver, RTTY equipment, diversity circuitry, security gear
AN/MRT-9	Radio set, HF, RTTY, air/mobile tranportable shelter, major components: T-368 and R-390
AN/MSC-57	Radio set, 7.25-8gHz via satellite, FM, 3-100w, 115/230VAC 50-60Hz, 22-30VDC, 1375lbs
AN/MSC-58	Radio set, 240-315mHz via satellite, FM, 1-100w, 115/230VAC 50-60Hz, 22-30VDC, 9500lbs
AN/PRC-6	Transceiver, 47-55.4mHz, major component: RT-196, Korean war
AN/PRC-8	Transceiver, 20-28mHz, FM, 1w, manpack/ vehicular/fixed station, 1.5, 6, 67.5 VDC (receive), 135VDC (transmit), BA-279 mil-type battery, 8 lbs, Korean war
AN/PRC-9	Transceiver, 27-39mHz, FM, similar to AN/PRC-8
AN/PRC-10	Transceiver, 38-55mHz, FM, similar to AN/PRC-8, less than 1 watt
AN/PRC-25	Transceiver, 30-76mHz, 920 chan, 50kHz

	spacing, FM, short-range, 1-2w, major component: RT-505/PRC-25, 24VDC from BA-4386 mil-type battery, solid-state except for 2DF4, 18 lbs
AN/PRC-41	Transceiver, 225-400mHz, AM, 3w, manpack/ vehicular/field use, major component: RT-695
AN/PRC-41A	Transceiver, variant of AN/PRC-41, uses the RT-695A and adds "X-Mode" (secure/scrambled voice)
AN/PRC-47	Transceiver, Special Forces, 2-12mHz, SSB/CW, 20 and 100w (PEP), major component: RT-67, digital tuning, 24VDC, 26.5VDC, or 115VAC 400Hz, portable/vehicular/fixed use
AN/PRC-64A	Transceiver, Special Forces, 2.2-6mHz, AM/CW, 4 chan, crystal control, 5w CW, 1.5w AM, 31.2VDC from BA-1509 mil-type battery, CR-89/U or CR-78/U crystals
AN/PRC-68	Transceiver, 30-80mHz on 1000 chan, 50kHz spacing, 1w, 16VDC from BA-1588/U mil-type battery, handheld
AN/PRC-70	Transceiver, 2-76mHz, 25,000 chan, 100kHz spacing, FM/AM/CW/SSB, manpack, detent tuning, 30w (below 50 mHz), 20w (above 50 mHz), replaces AN/GRC-109, AN/PRC-74, and AN/PRC-77
AN/PRC-74	Transceiver, Special Forces, 2-12mHz, SSB/CW, 15w (PEP), 10.5-17VDC or 12-31VDC, or 110/220VAC, battery operated from 70 BA-30 or 10 BB-418/U mil-type batteries, or from PP-4514/PRC-74 supply, variants AN/PRC-74B and AN/PRC-74C operate 2-18mHz, replaced by AN/PRC-70
AN/PRC-77	Transceiver, Special Forces, 30-76mHz, 920 chan, 50kHz spacing, FM, manpack or vehicular, 1-2w, 24VDC from BA-4386 mil-type battery, major component: RT-841/PRC-77, replaced by the AN/PRC-70
AN/PRC-90	Transceiver, aircraft rescue, UHF, 3 channels, AM, 1/2w, 14VDC from 1568/U mil-type battery, comes with 243.0 and 282.8mHz crystals, 2 lbs (including battery), waterproof
AN/PRC-117	Transceiver, 30-90mHz, 2400 chan, 25kHz spacing, eight preset chan, FM, 1-10w, frequency-hopping

	mode, 12VDC, 13lbs, manpack, major component: RT-1406/PRC-117, Harris Corp
AN/PRR-9	Receiver, 47-57mHz, crystal controlled, 2 chan, for helmet/pocket/harness use, 6VDC from BA-505/U mil-type battery, 11oz. w/batt, used with AN/PRT-4
AN/PRT-4	Transmitter, 47-57mHz, crystal controlled, 2 chan, FM, 1/2w on one channel, 1/4w on other channel, 15VDC from BA-399/U mil-type battery, equiped with 51.0mHz crystal, used with AN/PRR-9
AN/TRC-24	Radio set, transportable, National Guard/Army Reserve, 50-1875mHz, various modes, 10-120w, major components: T-302 and R-417
AN/TRC-29	Radio set, transportable, National Guard/Army Reserve, microwave, rear-area multichannel communications, major components: T-389/TRC-29, T-303/G, R-543/TRC-29, and R-418/G
AN/TRC-38	Radio set, transportable, similar to AN/TRC-29, but with dual transmitting/receiving components
AN/TRC-39	Radio set, transportable, similar to AN/TRC-29, but with triple transmitting/receiving components
AN/TRC-40	Radio set, transportable, variant of AN/TRC-39
AN/TRC-41	Radio set, transportable, variant of AN/TRC-39
AN/TRC-68A	Radio set, transportable, 225-400mHz, 1750 chan, 100kHz spacing, AM, 1.5w, 24VDC or 115/230VAC 50-60Hz, major component: OA-2649, for airborne assault support
AN/TRC-80	Radio set, transportable, 4.4-5gHz, 5 voice and one RTTY channel, FM, 120F9, 1kW, 120/280VAC, 3ph, 400Hz, troposcatter propogation, deployed with Pershing missles
AN/TRC-87	Radio set, transportable/ground, UHF, major component R-1121
AN/TRC-90	Radio set, transportable, National Guard/Army Reserve, microwave terminal, FM, used with AN/PRC-47 sets

AN/TRC-97B	Radio set, transportable, National Guard/Army Reserve, 4.4-5gHz, FM, 10,000F9, 1kW, 120/208VAC 400Hz, for line-of-sight, troposcatter, or obstacle gain diffraction propogation
AN/TRC-108	Radio set, transportable, similar to AN/GRC-50
AN/TRC-109	Radio set, transportable, similar to AN/GRC-50
AN/TRC-110	Radio set, transportable, similar to AN/GRC-50
AN/TRC-117	Radio set, transportable, similar to AN/GRC-50
AN/TRC-129	Radio set, transportable, similar to AN/TRC-90
AN/TRC-132	Radio set, transportable, 4.4-5gHz, FM, multiplex operation, 1kW, 208VAC 3ph 60Hz, for troposcatter
AN/TRC-132A	Radio set, variant of AN/TRC-132, 10 kW
AN/TRC-138	Radio set, transportable, variant of AN/GRC-144 for repeater usage
AN/TRC-143	Radio set, transportable, similar to AN/GRC-50
AN/TRC-151	Radio set, transportable, variant of AN/GRC-50, but with dual set of major components
AN/TRC-152	Radio set, transportable, variant of AN/GRC-50, but with triple set of major components
AN/TRC-156	Radio set, transportable, 240-315mHz, FM, TACSATCOM-1 ground terminal system, 2 or 20w, 20-28VDC, 120lbs
AN/TRC-157	Radio set, transportable, 240-315mHz, FM, TACSATCOM-1 ground terminal system, 1-500w, 115/230 VAC 60Hz
AN/TRR-30	Receiver, 7.25-8gHz, FM, TACSATCOM-1 alert monitor, 18-30VDC
AN/TRR-32	Receiver, same capabilities as AN/TRR-30
AN/TSC-61A	Ground station, air-traffic control, transportable, major components: AN/ARC-51BX, AN/ARC-73A, AN/ARC-102, and AN/VRC-46 sets

AN/TSC-74	Control center, shelter mounted, ground communications, major components AN/GRC-106 and AN/VRC-46 sets
AN/TSC-79	Radio set, transportable, 7.25-8gHz, FM, TACSATCOM-1 ground terminal, 3w, 20-28VDC.
AN/TSC-80	Radio set, transportable, 7.25-8gHz, FM, TACSATCOM-1 ground terminal, 1.5-500w, 115/230VAC 60Hz
AN/TSC-85	Similar to AN/TSC-80, but 500w
AN/TSC-93	Similar to AN/TSC-85
AN/TSQ-70A	Ground station, air traffic control, transportable, major components: AN/ARC-51BX, AN/ARC-73A, AN/ARC-102, RT-524, and RT-511
AN/TSQ-71A	Shelter, for dual GCA installations, major components: AN/ARC-51BX, AN/ARC-73A, AN/VRC-46
	AN/TSQ-72A Ground station, air traffic control, major components: AN/ARC-51BX, AN/ARC-73A, AN/ARC-102, AN/VRC-46
AN/URC-10A	Transceiver, portable, air/sea rescue, 240-260mHz, two channels, AM, 200mw, 16VDC
AN/URC-11	Transmitter, air/sea rescue, single chan 243.0mHz, AM, odd power requirements, Korean war
AN/URC-68	Transceiver, 38-42 and 230-250mHz, 4 chan, xtal control, FM, 200mw UHF, 500mw VHF, 11-16VDC from BA-1112/U mil-type battery, common frequencies: 38.9, 40.1, 40.5, 41.0, 235.0, 241.0, and 245.5 mHz.
AN/URC-100	Transceiver, 30-88 and 225-400mHz, AM (UHF)/FM (VHF and via SATCOM), scrambled speech, manpack, Motorola
AN/URC-101	Variant of AN/URC-100, but 116-150 and 225-400mHz
AN/URC-104	Variant of AN/URC-100
AN/VRC-7	Transceiver, 47-58mHz, FM, cont tuning, 2 presets, 0.5w, 6 and 90VDC, major component: RT-70/GRC

AN/VRC-12	Radio set, vehicular/fixed use, 30-76mHz, FM, major components: RT-246/VRC, RT-524/VRC, R-442/VRC
AN/VRC-24A	Radio set, 225-400mHz, AM, vehicular version of AN/TRC-68A, major component: OA-2648/VRC-24A
AN/VRC-29	Radio set, National Guard/Army Reserve, similar to AN/GRC-46, but for armored personnel carriers, major component AN/GRC-19, replaced by AN/VSC-3
AN/VRC-34	Radio set, vehicular version of AN/GRC-87
AN/VRC-42	Radio set, short range, vehicular and fixed use, major components RT-246/VRC, RT-524/VRC, R-442/VRC
AN/VRC-43	Variant of AN/VRC-42
AN/VRC-44	Variant of AN/VRC-42
AN/VRC-45	Variant of AN/VRC-42
AN/VRC-46	Variant of AN/VRC-42
AN/VRC-47	Variant of AN/VRC-42
AN/VRC-48	Variant of AN/VRC-42
AN/VRC-53	Radio set, vehicular form of AN/PRC-25 and GRC-125
AN/VRC-64	Radio set, vehicular form of AN/PRC-77
AN/VSC-2	Radio set, HF, RTTY/AM/SSB/CW, major component: RT-662, replaced AN/VSC-1, variant of AN/GRC-122 and AN/GRC-142
AN/VSC-3	Radio set, similar to AN/VSC-2, replaces AN/VRC-29
AN/WRR-3	Receiver, 14-600kHz, 5 bands, AM/CW, 7&9 pin tube, mech digital frequency readout, 117VAC 60/400Hz, 80lbs, major component R-1134/WRR-3
BC-191	Transmitter
BC-312	Receiver, 1.5-18mHz
BC-314	Receiver, LW

BC-342	Receiver, HF
BC-348	Receiver, 200-500kHz and 1.5-18mHz, six bands, AM/CW, crystal filter, 915 kHz IF, BFO, MVC/AVC, 28v, 3a for DM-28 dynamotor, 10.5" x 18" x 9.5", 44lbs, variants:

Model	Manufacturer	Tube line-up
E,M,O,P,S	R.C.A.	41,6B8,6C5,6F7,6K7(3)
J,N,Q	Wells-Gardner	6SR7,6K6GT,6SA7,6SJ7, 6SK7WA (4)
H,K,L,R	Belmont Radio	6B8G,6C5,6F7,6J7, 6K6GT, 6K7 (3)

BC-375	Transmitter
BC-453	Receiver, AN/ARC-5 "Command Set", aka: R-23/ARC-5 and CBY-46129(ATA/ARA), 190-550kHz, IF 85kHz, 6-tubes, VFO, 28VDC
BC-454	Receiver, AN/ARC-5 "Command Set", aka: R-26/ARC-5 and CBY-46105(ATA/ARA), 3.0-6.0mHz, IF 1415kHz, 6-tubes, VFO, 28VDC
BC-455	Receiver, AN/ARC-5 "Command Set", aka: R-27/ARC-5 and CBY-46106(ATA/ARA), 6.0-9.1mHz, IF 2830kHz, 6-tubes, VFO, 28VDC
BC-457	Transmitter, AN/ARC-5 "Command Set", aka: T-19/ARC-5 and CBY-52209(ATA/ARA), 3.0-4.0mHz, 4-tubes, VFO, 28VDC
BC-459	Transmitter, AN/ARC-5 "Command Set", aka: T-22/ARC-5 and CBY-52211(ATA/ARA), 7.0-9.1mHz, 4-tubes, VFO, 28VDC
BC-610	Transmitter, 1.5-18mHz, AM/CW, 400w,(Eimac 250TH final), frequency by plug-in tuning units and final coils (up to three at once), FT-171B xtals, part of SCR-299, SCR-399, SCR-499, or GRC-38, AM requires BC-614 (or Halli. HT-5) speech amplifier, 390 lbs (without BC-614), 1939-1955
BC-778	Transmitter, "Gibson Girl", WWII, rescue, hand cranked, automatic SOS on 500 and 8364kHz, hand keyed on 500kHz, 18lbs

BC-946	Receiver, AN/ARC-5 "Command Set", aka: R-24/ARC-5 and CBY-46145(ATA/ARA), 520-1500kHz, IF 239kHz, 6-tubes, VFO, 28VDC
BC-1255	Receiver, 70-150mHz, vacuum tube, 6" cube, R. L. Drake
C-4074	Control head, for AN/ARC-73
C-4390	Control head, for AN/ARC-102
C-7088	Control head, for AN/ARC-131
C-7197	Control head, for AN/ARC-134
CU-1638/GR	Antenna coupler, 6 receiver distribution amp, 2-30mHz, 3 dB gain, 7 dB max noise figure, 50 ohm in & out, "N" connectors, rack mount 3.5" high, 15 lbs
CV-116/URR	FSK converter, receive only, 450-510kHz IF, rack mount 8.75", 80 lbs
CV-431	Frequency converter/transmitter, 228-258mHz, AM, 16 chan, 2w, 28VDC, major component of AN/ARC-60A
CV-1750	Receiving converter, 235-1000mHz, 60mHz IF out, round dials, nuvistors, 7077s & 7486, rack mount 3.5" high, Communications Electronics Inc.
CV-1892/TSC-26	SSB converter, USB/LSB, 455kHz IF, nuvistors, audio, carrier & sub-carrier meters, AFC, rack mount 5.25", 29 lbs
G-133	Receiver, 0.2-30mHz, AM/CW/SSB, tubes, Collins 51S1 converted to military aero by LTV, 117VAC 60/400Hz, and 24VDC (for panel lights), 40 lbs
IP-751	Spectrum display unit, 21.4mHz IF, bandwidth variable to 3mHz, 1"h X 3"w CRT, rack mount 3.5" high, Communication Electronics, Inc. (model SM-9310A)
MD-7	AM speech modulator, AN/ARC-5 "Command Set"
ME-165/G	Standing wave ratio power meter, internal 50 ohm/600 watt dummy load, 0-600 watt meter, uses twelve 600 ohm non-inductive resistors, 9.8"h X 10.5"w X

	9.8"d, 20 lbs, designed for T-368
OA-2648	Transceiver, 225-400mHz, 1750 chan, 100kHz spacing AM, 1.5w, 24VDC or 115/230VAC 50-60Hz, major component of AN/VRC-24A
OA-2649	Similar to OA-2648, but for AN/TRC-68A set
PP-629/URR	Power supply for R-391 autotune circuit, 24VDC, 3amps
PP-2684	Power supply for T-784/GRC-109 and R-1004/GRC-109, input 75, 90, 110, 130, 150, 180, 220, 260 VAC and 6 VDC, output 6.3 VAC @ 1.5A, 450 VDC @ 100 mA, 1.5 VDC @ 300 mA, 108 VDC @ 20 mA regulated, 10" X 8.5" X 5.5", 28 pounds, Admiral Corporation, 1962-1969. Part of AN/GRC-109.
PP-2684A	as above, except different case and cover fasteners. Oklahoma Aerotronics Inc., 1969-1973.
PP-2685	Power supply for T-784/GRC-109 and R-1004/GRC-109, Input 75, 90, 110, 130, 150, 180, 220, 260 VAC. Output same as PP-2684. 8.5" X 5.5" X 5.5", 12 pounds, Admiral Corporation, 1962-1969
PP-2685A	as above, except different case and cover fasteners. Oklahoma Aerotronics Inc., 1969-1973.
R-23/ARC-5	Receiver, AN/ARC-5 "Command Set", aka: BC-453(SCR-274N) and CBY-46129(ATA/ARA), 190-550kHz, IF 85kHz, 6-tubes, VFO, 28VDC.
R-24/ARC-5	Receiver, AN/ARC-5 "Command Set", aka: BC-946(SCR-274N) and CBY-46145(ATA/ARA), 520-1500kHz, IF 239 kHz, 6-tubes, VFO, 28VDC
R-25/ARC-5	Receiver, AN/ARC-5 "Command Set", aka: CBY-46104(ATA/ARA), 1.5-3.0mHz, IF 705kHz, 6-tubes, VFO, 28VDC
R-26/ARC-5	Receiver, AN/ARC-5 "Command Set", aka: BC-454(SCR-274N) and CBY-46105(ATA/ARA), 3.0-6.0mHz, IF 1415kHz, 6-tubes, VFO, 28VDC
R-27/ARC-5	Receiver, AN/ARC-5 "Command Set", aka: BC-455(SCR-274N) and CBY-46106(ATA/ARA), 6.0-9.1mHz, IF 2830kHz, 6-tubes, VFO, 28VDC

R-48/TRC-8	Receiver, 230-250mHz, guards 243.0mHz, tubes built-in speaker, squelch, 117VAC, 75lbs
R-108/GRC	Receiver, 20-28mHz, FM, tubes, 135VDC and 6VDC, 32lbs, part of AN/GRC-8 set.
R-109/GRC	Receiver, 27-39mHz, otherwise same as R-108
R-110/GRC	Receiver, 38-54mHz, otherwise same as R-108
R-125/GRC-10	Receiver, 54-80mHz, FM
R-174/GRR-5	Receiver, 1.5-18.0mHz, 4 bands, AM/SSB/CW, 8 tubes, no speaker, 8 and 600 ohm output, 90 and 1.5VDC, 23lbs
R-278	Receiver, 225-400mHz, 100kHz, autotune, 44 tubes, requires external speaker or headphones, 115 lbs, Collins
R-388/URR	Receiver, 0.5-30.5 mHz, militarized Collins 51J-3, 30 bands, linear tuning, 5-step crystal filtering, S-meter, AM/CW, 117VAC 60Hz
R-389	Receiver, 15-1500kHz, 2 ranges, 7 bands, mechanical digital dial, PTO, AM/CW, bandwidths: 0.1/1/2/4/8kHz, (0.1&1 xtal), 7&9 pin tubes, autotune, dual audio chains, squelch, rack mount 10.5" high, 82 lbs, production:

contract	year	manufacturer	quantity
14214-PH-51	1951	Collins Radio	unknown

R-390	Receiver, 0.5-32mHz, thirty-two 1mHz bands, mechanical digital dial, PTO, AM/CW, bandwidths: 0.1/1/2/4/8/16kHz (0.1&1 xtal, no mech filters), 7&9 pin and 2-6082 tubes(hv reg), dual audio chains, squelch, two RF stages, 125 ohm balanced antenna in w/twinax and unbalanced w/"C" connectors, rack mount 10.5" high, 90 lbs, production:

contract	year	manufacturer	quantity
14214-PH-51	1951	Collins Radio	unknown
26579-PH-52	1952	Motorola	unknown

R-390A Receiver, 0.5-32mHz, thirty-two 1mHz bands, mechanical digital dial, PTO, AM/CW, bandwidths: 0.1/1/2/4/8/16 kHz (0.1&1 xtal, others mech), 7&9 pin tubes, dual audio chains, single RF stage, 125 ohm balanced ant input w/twinax or unbalanced w/"C" connector, rack mount 10.5" high, 85 lbs, production:

contract	year	manufacturer	quantity
14214-PH-51	1955	Collins Radio	300-400
63-PH-54	1955	Motorola	10,000
375-PH-54	1955	Collins Radio	10,000
08719-PH-55	1956	Collins Radio	10,000
14-PH-56	1956	Motorola	10,000
14385-PH-58	1958	Motorola	10,000
42428-PC-58	1959	Stewart-Warner	10,000
20139-PC-60-A1-51	1960	Stewart-Warner	10,000
23137-PC-60	1960	Electronic Asst. Corp.	10,000
21852-PC-61	1961	Capehart Corp.	10,000
35064-PC-62	1962	Amelco	10,000
37856-PC-63	1963	Teledyne/Imperial	10,000
DA-36-039-SC-81547	1963	Stewart-Warner	10,000
FR-11-022-C-4-26418(E)	1966	Comm. Systems	10,000
FR-36-039-N-6-00189(E) or DAAB05-67-C-0155	1967	Electronic Asst. Corp.	10,000
DAAB05-68-C-0040	1968	Dittmore-Freimuth	unknown

(for more information from ER #24 & #27)

R-391 Receiver, identical to R-390 except w/8 channel autotune mechanical memory (requires external 24VDC 3amp supply, PP-629/URR), 87.2 lbs, production:

contract	year	manufacturer	quantity
21852-PH-50-93	1950	Collins	unknown
14214-PH-51	1951	Collins	unknown
11424-PH-51	1951	Collins	unknown

R-392 Receiver, 0.5-32mHz, thirty-two 1mHz bands, mechanical digital dial, PTO, AM/CW, bandwidths: 2/4/8kHz, 7&9 pin & octal tubes including 26A6, 26A7, 26C6 & 26D6, ruggidized watertight vehicular case: 11.5"h X 14.5"w X 11"d, 58 lbs, 28VDC 5amps, production:

contract	date	manufacturer	quantity

3075-PH-51	1951	Collins Radio	unknown
11653-PH-52	1952	Collins (subcontracts to Stewart-Warner and Stromberg-Carlson)	unknown
52713-PP-61	1961	Dubrow Electronic Ind.	unknown
15283-PP-63	1963	Western Electric	unknown

R-417	Receiver, 50-1875mHz, 6 bands, RTTY/FAX and other specialized emissions, part of the AN/TRC-24 set, 115VAC 60Hz
R-418/G	Receiver, 1.7-2.4gHz, pulse-position modulated accessory equipment, AN/TRC-29 set, 115VAC 60Hz
R-442/VRC	Receiver, 30-76mHz, 920 chan, part of AN/VRC-12, AN/VRC-44, AN/VRC-47, and AN/VRC-48 sets, 24 VDC
R-508	Receiver, 228-258mHz, AN/ARC-60A set, 28VDC
R-543/TRC-29	"Order wire receiver", 1.7-2.4gHz, part of AN/TRC-29 set, 115VAC 60Hz
R-648/ARR-41	Receiver, 190-550kHz and 2-25mHz, AM/CW, tubes, mech digital frequencr readout, mech filters, BFO, dial lock, 24VDC dynamotor, 35lbs
R-808/GRC-14	Receiver, 2-32mHz, AM/CW/FSK narrow/wide, built-in RTTY converter, 117VAC or 24VDC, 130lbs
R-892/URR-44	Receiver, 0.54-19mHz, AM, tubes, 117VAC 60Hz, 70lbs
R-902A/L	Receiver, 1.5-8mHz, AM/CW, remote-control by 45-bit serial data stream, requires 5, 15, and 36 VDC, (difficult to convert to civilian use)
R-1004/GRC-109	Receiver, 3-22 MHz, three bands, mechanical analog dial, AM/CW, 6 tubes (1T4, 1U5, 1L6), single conversion, 455 KHz, 8.5" X 5.5" X 5.5", 11 lbs, Admiral Corp., 1.4 VDC @ 300 mA, 108 VDC @ 30 mA, 1962-1969. Part of AN/GRC-109.
R-1004A/GRC-109	as above, except different case and cover fasteners. Oklahoma Aerotronics Inc., 1969-1973.
R-1051	Receiver, 2-30mHz, direct dial frequency synthesis, 0.5kHz increments, USB/LSB/ISB/AM/FSK, bandwidths: 3.1/6kHz (tied to mode), solid-state except for two

	rf tubes, 7"h X 17.4"w X 18.9"d, 84 lbs
R-1051B	As above except tunes to 0.1kHz increments.
R-1121/TRC-87	Receiver, 225-400mHz, 50kHz spacing, AM, 120/208VAC 400Hz 3ph, allegedly operable on 117VAC 60Hz, Motorola
R-1123/ARC-73	Receiver, 116-152mHz, 720 chan, AM, 28VDC, part of AN/ARC-73 set, used w/C-4074 control head
R-1134/WRR-3	Receiver, 14-600kHz, AM/CW, mech digital freq readout, tubes, 117VAC 60/400Hz, 80 lbs
R-1287/GRC-143	Receiver, 4.4-5gHz, multichannel PCM equip: 3200F9, 115/230VAC 47-63Hz
R-1307/URR	Receiver/freq. selective voltmeter, 0.3-800kHz, six bands, analog dial, AM/FM/USB/LSB/CW, bandwidths: 1/2/4/8kHz, 7&9 pin/nuvistor tubes, rack mount 9"h, 25 lbs, Rycom (Railway Communications)
R-1329	Receiver, 220-1850mHz, 4 bands, 500F9, 115VAC 47-420Hz
R-1331	Receiver, 601-1000mHz and 1350-1850mHz, cont tuning, FM/1200F9, 115VAC 47-63Hz
R-1401	Receiver, 1-600kHz, 6 digit electronic counter w/DAFC, AM/CW/USB/LSB/MCW/FSK, bandwidths: 0.15/1/3/6kHz, solid-state w/nixies in counter, ant attn, noise blanker, s-meter, rack mount 3.5"h, 34 lbs, Communications Electronics Inc. (model 357)
R-1420/URR	Receiver, 30-300mHz, two bands/tuners, analog filmstrip dial, bandwidths: 20/300kHz, nuvistors and solid-state, rack mount 3.5"h, Communications Electronics, Inc. (model 905A)
R-1467	Receiver, 4.4-5gHz, 3000F9, 120VAC 60Hz
R-1490A/G	Variant of R-1401, specs unknown
R-2093/TRQ-35V	Spectrum monitor, 2-30mHz, 3kHz steps, AM/SSB/FM, mil. version of BR Communications Model RSS-4 HF, 25 kHz bandwidth, 30 minutes activity memory
R-2174/URR	Receiver/freq. selective voltmeter, 0.3-420kHz, six

	bands, analog dial, AM/USB/LSB, bandwidths: 0.1/3/10 kHz, 7&9 pin tubes, rack mount 9" high, 25 lbs, Rycom (Railway Communications)
RC-3A/GSQ-151	Receiver, seismic detection, 126.6 mHz fixed, 9 VDC.
RP-1	Power supply for RT-3 and RR-2. Input 75, 90, 110, 130, 150, 180, 220, 260 VAC and 6 VDC, output 6.3 VAC @ 1.5A, 450 VDC @ 100 mA, 1.5 VDC @ 300 mA, 108 VDC @ 20 mA regulated, 10" X 8.5" X 5.5", 28 lbs, Admiral Corp., 1950-1962. Part of RS-1.
RP-2	Power supply for RT-3 and RR-2. Input 75, 90, 110, 130, 150, 180, 220, 260 VAC. Output same as RP-1. 8.5" X 5.5" X 5.5", 12 lbs, Admiral Corp., 1950-1962.
RR-2	Receiver, 3-22 MHz, three bands, mechanical analog dial, AM/CW, 6 tubes (1T4, 1U5, 1L6), single conversion, 455 KHz, 8.5" X 5.5" X 5.5", 11 lbs, Admiral Corp., 1.4 VDC @ 300 mA, 108 VDC @ 30 mA, 1950-1962. Part of RS-1.
RS-1	Radio Set, 3-22 MHz, consists of: RT-3 transmitter, RR-2 receiver, RP-2 AC power supply, RP-1 AC/DC power supply. Built for CIA, Also see AN/GRC-109 and individual entries.
RT-3	Transmitter, 3-22MHz, three bands, crystal control (FT-243), CW, 6AC7 oscillator, 2E26 final amp, built-in key, 8.5" X 5.5" X 5.5", 12 lbs, Admiral Corp., 6.3 VAC or VDC @ 1.5A, 450 VDC @ 100mA, 1962-1969. Part of RS-1.
RT-60	Transceiver, air/sea rescue, 240-260 and 270-290mHz (normally set for 243.0 and 282.8mHz), AM
RT-66	Transceiver, 20-28mHz, cont tuning or presets, FM, 27 tubes, 12 or 24VDC from PP-109, PP-112, or PP-282 power supplies, 42 lbs
RT-67	Transceiver, similar to RT-66, 27-39mHz
RT-67/PRC-47	Transceiver, 2-12mHz, 1kHz steps, digital tuning, SSB/CW, 20 and 100w (PEP), major component of AN/PRC-47 set, 24 or 26.5VDC or 115VAC 400Hz

RT-68	Transceiver, similar to RT-66, 38-55mHz
RT-70/GRC	Transceiver, 47-58mHz, cont tuning or two presets, FM, 1/2w, 90 and 6VDC, major component of AN/VRC-7 set, Korean war
RT-77/GRC-9	Transceiver, 2-12mHz, cont tuning, AM/CW, 15w CW, 7w AM, 6, 12 or 24VDC, part of AN/GRC-87 and AN/GRC-34 sets
RT-174/PRC-8	Transceiver, major component of AN/PRC-8
RT-175/PRC-9	Transceiver, major component of AN/PRC-9
RT-176/PRC-10	Transceiver, major component of AN/PRC-10.
RT-196/PRC-6	Transceiver, 47-55.4mHz, crystal control (CR-23), hand-held, 13 tubes, 1.5, 45, and 90VDC, 6lbs, replaced by AN/PRR-9 and AN/PRT-4 combo set, Korean war
RT-246/VRC	Transceiver, 30-76mHz, 10 autotune presets, FM, 10-35w, major part of AN/VRC-12, 56lbs
RT-294B	Transceiver, 24-52mHz, 280 chan, 1kHz spacing, FM, 8w, major component of AN/ARC-44, uses SB-327/ARC-44 control head, 28VDC
RT-295	Transceiver, 225-400mHz, 1750 chan, AM, 1w, part of AN/ARC-45, requires 28, 150 and 300VDC
RT-311/ARC-38	Transceiver, 2-25mHz, 20 autotune presets, AM, 100w (above 14 mHz), 90w (below 14 mHz), similar to Collins 618-S1, 25 tubes, requires 28, 250, 600, -50, -65 and 6VDC, and 117VAC 400Hz, no SSB (see RT-594 for SSB), 65lbs
RT-348/ARC-54	Transceiver, 30-40mHz, 50kHz spacing, FM, 10w, major component of ARC-54, 28VDC
RT-380/AR	Transceiver, 2-18mHz, AM/CW, similar to Collins 18S4, 100w, 10 chan, 16 tubes, 600 ohm audio, requires 400, 750 and 28VDC, Collins
RT-505/PRC-25	Transceiver, 30-76mHz, 920 chan, 50kHz spacing, FM, 1-2w, solid-state except 2DF4 final, 20VDC from mil-type BA-4386 battery, 18lbs

RT-524/VRC	Transceiver, manual tuning version of RT-246/VRC, built-in speaker, part of AN/VRC-12 and AN/TSQ-70A sets, and in modified form of AN/GRC-163 sets
RT-594/ARC-38A	Transceiver, like the RT-311/ARC-38, but w/SSB
RT-662/GRC	Transceiver, 2-30mHz, 1kHz chan spacing, SSB/CW, 200w CW, 400w (PEP) SSB, 27VDC, major component of AN/GRC-106, AN/GRC-122, AN/GRC-144, AN/VSC-2, and AN/VSC-3 sets, 27VDC, 47lbs
RT-671	Transceiver, 2-11.999mHz, 20/100w PEP, USB, digital /1kHz steps, solid-state except: 5907, 7761, 7905 & PL-177WA final, 7"h X 21.25"w X 13.5"d, 45 lbs, Collins Radio, 24VDC 20amps or 115VAC 400Hz
RT-695	Transceiver, 225-400mHz, crystal control, AM, 3w, 24VDC, major component in AN/PRC-41
RT-695A	Transceiver, variant of RT-695, allows for speech scrambling, major component of AN/PRC-41A
RT-698/ARC-102	Transceiver, 2-30mHz, 1kHz channels, AM/CW/SSB, 100w AM/CW, 400w (PEP) SSB, used with C-3490 control head, 28VDC, 64lbs
RT-702/ARC-51X	Transceiver, 225-399.9mHz, 1750 chan, 100kHz spacing, AM, 16w, 28VDC inverted to 115VAC 400Hz, guards 243.0mHz
RT-718	Transceiver, 3.4-5 and 6.5-30mHz, cont tuning, SSB/CW, 100w (PEP), 110/220VAC 50-400Hz or 12VDC (using MP-1 power supply), part of AN/FRC-93 set, Collins Radio
RT-742/ARC-51BX	Transceiver, similar to RT-702/ARC-51X, but 50kHz chan spacing
RT-823	Transceiver, 30-76mHz, 920 chan, FM, 1 and 10 w, part of AN/ARC-131 set, used w/C-7088/ARC-131 control head, 28VDC, 27lbs (+3 lbs with C-7088)
RT-834/GRC	Transceiver, version of RT-662/GRC, but 100Hz spacing
RT-841/PRC-77	Transceiver, 30-76mHz, 920 chan, 50kHz spacing, FM, 1-2w, 24VDC from mil-type BA-4386 battery, similar to RT-505/PRC-25, but solid-state, part of

	AN/PRC-77, AN/VRC-64, and AN/GRC-160 sets
RT-857/ARC-134	Transceiver, 116-150mHz, 1360 chan, 25kHz spacing, AM, 25-40w, 28VDC, used with C-7197 control head, 20 lbs, RT-857/ARC-134B variant has 50 kHz spacing, made by Wilcox
RT-1167/ARC-164	Transceiver, 225-400mHz, 25kHz chan spacing, CW or scrambled/unscrambled AM, 1-10w, 18, 24 or 28VDC
RT-1393/USQ	Transceiver, advanced all purpose, HF, 284,000 chan, 100 field programmable memory channels, simplex, duplex or semi-duplex operation, AM/SSB/ISB, LED freq readout
RT-1406/PRC-117	Transceiver, 30-90mHz, 2400 chan, 25kHz spacing, 8 presets, FM, 1 or 10w (0.1w model avail), 12VDC, automatic frequency hopping capability
SCR-274N	Signal Corps designation for AN/ARC-5 "Command Set".
SCR-299	Radio set, major components: BC-610, (2) BC-312
SCR-399	Radio set, major components: BC-610, (2) BC-314
SCR-499	Radio set, major components: BC-610, (2) BC-318
T-19/ARC-5	Transmitter, AN/ARC-5 "Command Set", aka: BC-457(SCR-274N) and CBY-52209(ATA/ARA), 3.0-4.0mHz, 4 tubes, VFO, 28VDC
T-22/ARC-5	Transmitter, AN/ARC-5 "Command Set", aka: BC-459(SCR-274N) and CBY-52211(ATA/ARA), 7.0-9.01mHz, 4 tubes, VFO, 28VDC
T-47/ART-13	Transmitter, 2-18mHz, AM/CW/MCW, 100w, 11 chan autotune mechanical memory, uses C-87 control box, tube line-up: 6V6, 12SA7, (2) 12SJ7, (2) 12SL7, (2) 811, 813, 837, and (2) 1625, requires 24VDC 10A, 400VDC 225ma. and 1250VDC 250ma, dynamotor DY-12/17, 23.5" x 16" x 11", 85 lbs, part of AN/ART-13
T-74/CRT-3	Transmitter, "Gibson Girl", see BC-778
T-195/GRC-19	Transmitter, 1.5-20mHz, 80-100w plate mod AM/CW, 4 bands, PTO, autotune, antenna coupler, 4X150D final 2-4X150D mod, 11.5h X 22w X 14.25d, 135 lbs,

	28VDC 42amps, Collins Radio
T-235/GRC-10	Transmitter, 54-71mHz, cont tuning, 10 and 40w, 60F9 and 80F9, part of AN/GRC-10, AN/GRC-39, AN/GRC-40, AN/MRC-68A, and AN/MRC-112, 26VDC or 115/230VAC 60Hz
T-302	Transmitter, 50-1875mHz, various emissions, 10 to 120w, part of AN/TRC-24, AN/MRC-54, AN/MRC-69 and AN/MRC-73, 115VAC 60Hz
T-303/G	Transmitter, 1.7-2.4gHz, 4500F9, 10w, part of AN/TRC-29, AN/TRC-38, AN/TRC-39, AN/TRC-40, and AN/TRC-41, 115VAC 60Hz
T-368/URT	Transmitter, 1.5-20mHz, 450w CW, 400w plate mod AM, 4 bands, PTO, 4-400 final, 4-125 mod, 41.5"h X 32"w X 31"d, 650 lbs, 115VAC single-phase 2200w (AM)
T-389/TRC-29	"Order Wire" Transmitter, part of AN/TRC-38, AN/TRC-39, AN/TRC-40, AN/TRC-41, and AN/TRC-29, 115VAC 60Hz
T-631/GRC-14	Transmitter, 2-20mHz, 400 watts, 117VAC 60Hz
T-784/GRC-109	Transmitter, 3-22MHz, three bands, crystal control (FT-243), CW, 6AC7 oscillator, 2E26 final amp, built-in key, high-speed keyer port for AN/GRA-71, 8.5" X 5.5" X 5.5", 12 lbs, Admiral Corp., 6.3 VAC or VDC @ 1.5A, 450 VDC @ 100mA, 1962-1969. Part of AN/GRC-109
T-784A/GRC-109	as above, except different case and cover fasteners, Oklahoma Aerotronics Inc, 1969-1973. Part of AN/GRC-109
T-789/ARC-73	Transmitter, 116-150mHz, 680 chan, 80 presets, AM, 20w, requires C-4074/ARC-73A control head, 28VDC
T-893	Transmitter, 601-1000mHz and 1350-1850mHz, 1200F9, 8-30w, used with various sets, 115VAC 60Hz
T-961/GRC-143	Transmitter, 4.4-5gHz, 3200F9, 1kW, used with AN/GRC-143, AN/TRC-112, and AN/TRC-121, 115/230VAC 60Hz
T-983	Transmitter, 220-1850mHz, 500F9, 15-25w, used with

	several sets, 115VAC 47-420Hz
T-1054/GRC-144	Transmitter, 4.4-5ghz, 3000F9, 0.25w, part of AN/GRC-144 and AN/TRC-138, 120VAC 60Hz
URR-52B	Receiver, 30-1000mHz, analog dials, four bands/ tuners, AM/FM/CW bandwidths: 20/75/300kHz, built-in SDU, nuvistors and solid-state, rack mount 5.25"h, Communications Electronics, Inc. (model RS-111)

Edited by Terry O'Laughlin, WB9GVB

Contributors: Tom Adams, Mike Crestohl, Bob Folwaczny, Dennis Gibbs, Emil Kasprzyk, Takashi Maeba, Don Merz, Terry O'Laughlin

Additions, corrections and suggestions? Ask for the new volunteer submission guide from olaughlin@vilas.uwex.edu or landline at (608) 258-1810

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 04:07:42 1994
Date: Wed, 7 Dec 94 20:37:54 HST
From: jeffrey@math.hawaii.edu (Jeffrey Herman)
Message-Id: <9412080637.AA25026@kahuna.math.hawaii.edu>
Subject: 2 want-ads from the .swamp

Two want-ads from wrecked.radiator.swamp // Jeff NH6IL
****

Article: 17937 of rec.radio.swap
>From: rmccarty@netcom.com (roger mccarty)
If you have, or know someone whom has, a speaker for the old Hammarlund radios, I would very much appreciate hearing from you.
Thanks in Advance,
Roger rmccarty@netcom.com

Article: 17946 of rec.radio.swap
>From: turner@safety.ICS.UCI.EDU (Clark Savage Turner WA3JPG)
I am looking for the SWBC crystals for the Drake R-4C (and maybe spare tube sets if anyone has them). The ones I really want are:
17.1, 20.6, 22.6, 26.1, 28.6 MHz.
Any crystals of these frequencies in HC 6/U will do. (I believe that is the size, not the tiny ones, but the ones just smaller than the FT 243's that are in a metal can).
Clark Savage Turner, Graduate Student Researcher

Software Engineering Testing
Department of Info. and Computer Science 1514 Verano Place
Irvine, CA. 92717   Irvine, CA. 92715
(714) 824 4049   (714) 856 2131
WA3JPG, QRP #3526, active on HF, VHF and UHF.

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 19:44:12 1994
Date: Thu, 8 Dec 1994 13:15:16 -0700
Message-Id: <199412082015.NAA27124@Freenet.HSC.Colorado.EDU>
From: al511@freenet.hsc.colorado.edu (Robert Neece)
Subject: Amp Supply LK550-ZC Help ...

Recently, there was an interesting discussion between Rick Blank, KI5SL, and Scott, NX7U, regarding the Amp Supply LK550.

I believe it was Rick who asked:

>>1. When I key the amp but have absouloutely no signal going into
>>   the amp, I have a plate current reading of about 320 to 340 ma.
>>   and the plates have a red glow to them . . .. Is this normal?

Scott replied that such a condition can be considered perfectly normal, and went on to explain his conclusion on the basis of Eimac's literature on tube operation.

Scott's commentary about tube operating conditions is correct. But, I am not sure it addresses Rick's question. I took Rick's question to be "is this normal for the LK550" rather than "is this an acceptable condition for the 3-500Z tubes found in the LK550."

Scott gave a good answer to the question of acceptable 3-500Z operating conditions, but did not address the specific LK550 issue.

I have never used an LK550. I have quite a bit of experience, though, with the Drake L-4 and L-4B, and the Heath SB-220, each of which uses the 3-500 class of tubes in cathode-driven linear service. I assume the LK550 to be similar in design concept.

In most ham amplifiers using the 3-500, 320-340 mA of resting (idle) plate current would not be "normal." With a plate potential of, say, 3 kV, this current would produce a full kW of idling plate dissipation. At idle, there is no output, so a kW of input is a big bunch of wasted power.

What most designers do is to use *some* bias to limit idling plate current to a level that represents a trade-off between efficiency and linearity. The greater the idling plate current, the greater the linearity, but the worse the efficiency will be. Zero idling plate current is characteristic of Class C operation, a wonderfully efficient but terribly nonlinear class of operation. Idling plate current equal to full-output plate current is characteristic of Class A operation, a wonderfully linear, but terribly inefficient class of operation.

Designers of amps for linear service chose Class AB1, AB2, or B. These represent places along the spectrum from Class A to Class C. Most ham amps of the 3-500Z variety are designed to operate in Class B, although one or another of the AB Classes can also be found.

For Class B, 200 or so mA would be closer to "normal." This is more efficient, but perhaps a bit less linear, than 340 mA of resting plate current. (I won't elaborate about what portion of the cycle is conductive and what portion of the cycle is nonconductive in the respective classes of amplifier operation).

200 mA or so is usually found in the Drake and Heath amps when the SSB plate voltage is selected. I'd bet that a similar level was "normal" for the LK550. Saves a lot of wasted power.

The best answer, though, is to look at the LK550 manual to see what Amp Supply specified as typical resting plate current.

Rick then asks:

>>If not [normal],what kind of corrective measures should I
>>look into to correct this.

Many manufactures used a zener diode to create the bias voltage needed to limit idling plate current. Often, the diodes weren't up to the job. Heath, for example, upgraded the zener in the later production of the SB-220 to deal with problems of failure leading to high idling plate current. Another typical source of the trouble is dirty contacts in the t-r relays. Often, one set of those contacts was used to switch the bias voltage from a high bias voltage needed to bias the tubes to cutoff (when the amp is in standby) to the lower voltage needed to set idling current in the condition where the amp is activated, but not driven. I have seen problems here in several examples of the Drake amps.

Why, one might reasonably ask, is bias needed for a "zero bias" tube such as the 3-500Z? The 3-400, 3-500 series of tubes are "zero bias" tubes, meaning that their plate dissipation ratings will not be exceeded even in the absence of bias, *but* only up to a specified

maximum plate voltage. At higher voltages, bias is needed to
avoid excess dissipation. Because higher voltages are associated
with increased gain and linearity, many manufacturers (desiring
to reduce excitation requirements and to increase efficiency)
selected a higher B+ that would be compatible with pure zero
bias operation. Thus, they chose to employ a simple bias
circuit, often using the zener.

Ricks asks finally:

> > Could this also be due to HV power supply ripple?

Nah. But it never hurts to check the electrolytics in the
power supplies of this type of amp. Especially one that has been
out of service for a while.

Scott then comments:

> NOW, many commercial amps (and homebrews for that matter) use a VOX-like
> relay in the grid bias circuit of triode amps to cut off the amp when no
> signal is applied, only turning on (and applying normal operating bias) when
> the VOX relay closes. The intent being to reduce the total amount of time
> the tubes dissipate a large amount of heat. This approach is well-documented
> in the pages of QST, particularly for 3-500Z amps, and could easily be
> applied to yours, if you wanted.
>
> So sounds like Amp Supply chose not to implement the bias cutoff circuit is
> all.

But, Rick's question did not address *standby* current but, rather,
idling or *resting* plate current in the no-drive condition. I'd
be very suprised to learn that the LK550 did not bias to cutoff in
the *standby* condition.

Bottom line: check the Amp Supply specs. If your idle current is
higher than spec., check the bias circuit and any relay contacts
that conduct the voltage produced by that circuit.

As I say, Rick and Scott got my juices flowing. Thanks, gents!

--
73 de Bob, K0KR

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 17:41:33 1994
Message-Id: <0itobg200ioV0Zz_40@andrew.cmu.edu>
Date: Thu, 8 Dec 1994 13:01:16 -0500 (EST)
From: Benjamin Cox <thoth+@CMU.EDU>
Subject: apartment antenna

Hi all -

I'm the proud new owner of a Drake 2NT; I think it works but I don't know for sure. This is my first boatanchor-type piece of equipment, so I'm in need of a bit of advice to get started.

First, I'm not sure what kind of antenna to use. Right now I live on the top floor of a 9-story apartment building (but on the inside of the building's "U" shape, unfortunately) but next month I'm moving to a first-floor apartment a few blocks away. My lease has a "no antennas on the roof" clause. What's my best bet for an antenna in these circumstances?

Also, I'm in need of a receiver to use with the 2NT. I assume (by looking at the connections) that the 2NT is designed to be used with a "sister" receiver; does anyone know the designation of this receiver (or one I can substitute for it) and/or where I can get one?

Any help would be appreciated. I've been having trouble getting added to the list (I've sent mail to boatanchors-request but received no response), so please send replies to me, not just the list.

Thanks!

--
Ben Cox   thoth+@cmu.edu

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 17:29:58 1994
From: rdkeys@csemail (R. D. Keys)
Message-Id: <9412081810.AA113002@csemail.cropsci.ncsu.edu>
Subject: CWIST Friday Night Fist Function
Date: Thu, 8 Dec 94 13:10:30 EST

I will be on again at the appointed midnight hour for the continuing saga of the Sacred and Most Honorable Friendly Society of Brass Pounding Fist-Functioning CWISTS.

For the past several weeks, I have not been around for the CWIST Friday Night Fist Function. But, this Friday night seems like a good one, again. So, consider this the posting for the gettogether.

Remember that the time is midnight LOCAL time, so that folks plus or minus a time zone or two should be able to work others an hour earlier or later if they want to play around longer on the brass. Concievably, one could pound brass for the entire day depending upon skip and have the possiblity of working other CWISTS.

Note that six possible frequencies are available for use. 1802.5, 3702.5, 7102.5, plus non-US compatible or capable frequencies of 1820, 3520, 7020 khz, for the Europeans, Asians, etc, who don't inhabit the novice bands. I don't know if that will work well, but we will give it a try. So, check whatever of the six frequencies you can use and if you don't hear anyone give a call or QSY to another channel. I will monitor as many as I can but probably only work the 160/80 channels.

73 Bob/NA4G

****

QST QST QST CQ CQ CQ DE NA4G NA4G NA4G BT
0814330UTC DEC 94
FM NA4G
TO ALL CW OPS WORLDWIDE BT
CWIST FRIDAY NIGHT FIST FUNCTION.
USA OPS QSW/QSX 1802.5/3702.5/7102.5KHZ MIDNIGHT LOCAL TIME FRIDAY NIGHT.
NON-USA OPS QSW/QSX 20 KHZ UP FROM THE BOTTOM BAND EDGE.
GET ON THE AIR AND ENJOY A PLAIN CW EVENING ON THE 40/80/160 METER BANDS.
USE A REAL HAND KEY (A STRAIGHT SENDING IRON OR BUG IS ENCOURAGED).
A VERY SIMPLE VERY INFORMAL STYLE FORMAT WILL BE UTILIZED.
CALL CWIST IMI DE YOURCALL K.
CALL FROM FIVE MINUTES BEFORE TO FIVE MINUTES AFTER THE HOUR.
LEAVE SPACE BETWEEN CALLS FOR OTHERS TO JOIN IN.
USE A ROUND-TABLE FORMAT SO SEVERAL FOLKS CAN JOIN IN SIMULTANEOUSLY.
ENJOY OLD-TIME AMATEUR RADIO AND TRY SOME FRIENDLY BRASS POUNDING.
EXCHANGE MORE THAN RST QTH NAME HELLO AND GOODBYE.
HELP ALONG THE NEW HAMS ON CW TO GET THEIR SPEED UP.
TELL A FAIR YARN OR TWO AMONG FELLOW CWISTS AND RAGCHEW A LITTLE WHILE.
TELL SOME HISTORY ABOUT THE OLD-TIME DAYS AND YOUR EXPERIENCES IN RADIO.
IF YOU ARE AN OLD TIMER PLEASE JOIN IN AND SHARE YOUR EXPERIENCES.
IF YOU WERE EVER A PROFESSIONAL PLEASE JOIN IN AND SHARE YOUR EXPERIENCES.
USE BOATANCHOR GEAR IF YOU HAVE IT AVAILABLE OR WHATEVER YOU HAVE.
QRP/QRO - QRQ/QRS - ARE ALL WELCOME.
SEE YOU THERE OM/YL.
73 TU SU DE NA4G BOB AR

****

Definition: A CWIST is a person with an active interest in the PRACTICE and USE of continuous wave radiotelegraphy as directly is appliccable to amateur radio. Such PRACTICE and USE may take the form of learning about radiotelegraphy and its history in amateur/commercial areas, its application to radio telecommunication, the practicing of the art and craft of radiotelegraphy, and the refining and developing of the technology of radiotelegraphy.

Let us all work together to continue to advance and promote the friendly use of CW on the amateur radio bands.

Let us continue to assist and help the newcomers and slowspeeds who are trying to get their CW going.

Let us to continue to promote the use of whatever gear you have up and available, be it the newest of sorts or the oldest boatanchor. Remember, CW generation has not changed since the days of Poulsen arcs, Alexanderson alternators, and Pliotrons.

Let us continue to promote the sharing and fellowship of the history and traditions of amateur radio (this includes all you OTs out there that have all sorts of goodly tidbits of history to relate to the young squirts on the block, and it includes all you young squirts on the block who, even though a bit new at CW and radio are the future of the service or hobby or profession).

Let us continue to promote the ``elmering'' of all of our new folks by the old timers aboard, in any way that we can. We should not be out to convert the brethren to CW, but should be there to elmer them and assist them in learning/practicing their skills, if possible.

So, OTs aboard, young squirts in the wings, high-speed afficionados of the art, and slow-speed ragchewers, join in on the fun. If your equipment is old boatanchor, so what. If your signal is a bit weak or chirpy, so what. If your antenna is just a mere piece of wire up into the trees, so what. YOU can still join in and participate.
YOU are the folks who will make it what it can be, a goodly learning time and an enjoyable evening for all.

See You There OM/YL.....

73 TU SU SK DE NA4G
Bob

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***************************************************************************
*  May you have fair winds and following seas on your watch at the key.  *
***************************************************************************
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From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 07:06:48 1994
From: mirage!pamars@uhura.neoucom.EDU (P.A.Marshall)
Message-Id: <9412080236.AA04043@mirage>
Subject: Re: FW: NATO Tactical Inverted V..

Date: Wed, 7 Dec 94 21:36:23 EST

>
> 8 segments at 22 inches or so. I would guess at 13 to 14 feet. I am
> going to get the guy to bring me one so that I can get a better
> description..
>

If you find that there are two dipoles at 90 degrees, then I think I know what you have. These are vertical fireing tactal HF rigs, the mast is actualy the coax, there is a BNC I think at the base. The idea as I understand it was to fire stright up, and you would get coverage despite blocking terrain, etc. I found them selling rather cheeply a few years back and picked up a few. It looks to me that you could remove one of the dipoles and the result would be your basic inverted vee, but I never got around to doing any real testing. The packaging was rather neat, the coax mast sections fit into pockets in a canvas bag, the top coax section has hooks on it so you can wind the wire, etc., the bottom section has the BNC and base plate on it. One thing, don't get dirt or sand in the joints... believe me :-)

Al Marshall   "Real Radios Glow in the Dark"   almarshall@acm.org

As nightfall does not come at once, neither does oppression. In both instances, there is a twilight when everything remains seemingly unchanged. And it is in such twilight that we all must be most aware of change in the air--however slight--lest we become unwitting victims of the darkness.
Justice William O. Douglas

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 11:26:19 1994
From: Gary M Diana <gmd@adm01.rfc.comm.harris.com>
Message-Id: <199412081403.JAA18396@usc02.rfc.comm.harris.com>
Subject: Re: FW: NATO Tactical Inverted V..
Date: Thu, 08 Dec 94 09:03:24 -0500

Sounds like what you guys are describing is what we refer to here as the RF-1936 portable NVIS (Near Vertical Incidence Skywave) antenna. From the bird's eye view, looks like the letter "X". The mast serves as a feed line, comes in a canvas bag which includes base plate, ground strap, guys, and even a hammer to pound in the ground stakes. TUNER NOT INCLUDED.

I'm using one currently at one our on-air test sites, and we've used them on vehicles too (parked vehicles!).

73 for now.
- Gary N2JGU
  gmd@rfc.comm.harris.com

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 14:50:27 1994
Date: Thu, 8 Dec 1994 10:59:12 -0500 (EST)
From: Tony Stalls <rstalls@access.digex.net>
Subject: Getting a Little Mushy (Again)
Message-Id: <Pine.SUN.3.91.941208101818.15489B-100000@access4.digex.net>

On Wed, 7 Dec 1994, Hugh D. Stegman wrote:

>
> Doug writes:
>
> >we're talking about serious contesting.
>
> Oh, that changes everything. Now we're into automated control of radios, and
> the old tube gear has met its match.

This is one of the reasons I don't get involved in contests any more. I once played with them and had fun and even got high score in my state in one of the smaller contests once, but with all this automatic control stuff they've pretty much pushed those of us that don't take contesting seriously completely out of the running. Sure you can rack up big points with automatic control, but I don't see the fun in that beyond setting the thing up and making it work. I suppose that one could even program a computerized rig to carry on QSO's in total. Imagine getting to the point that all that has to be done is put a timer on the rig for the beginning of SS with the only operator involvement being submitting the scores. The technology is around that can do that now, so it probably will happen... if it hasn't already.

If those folks are having a good time, then that's great, but that's definitely my cup of tea. In fact, that kind of high tech "progress" that is what has brought me back to my ham radio roots and all the wonderful folks here. To me (and I think most of your) THIS is what ham radio is all about and I don't mean the radios that glow in the dark. They're just the catalyst. It's the friendly perspective that at one time made introducing yourself as a ham to another member of what was then an amateur radio fraternity was something akin to finding a long lost relative. That spirit is obviously alive, well, and thriving among the BA folks.

Pardon my getting a little mushy about all this, but it's something that the talk of automated contesting reminded me about that I am delighted to have discovered again.

73,

Tony
K4KYO

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 19:42:51 1994
Message-Id: <n1425229370.61592@cpqm.saic.com>
Date: 8 Dec 1994 16:26:20 U
From: "Bob Scott" <Bob_Scott@cpqm.saic.com>
Subject: Ham quitting hobby

Found this on AOL. I think you can respond to him as LBasch@AOL.COM.
Drake line looks nice. Wish I had the money for the tuner...
73 Bob AC4QO

Subj: Quitting Hamming   94-12-06 19:42:57 EST
>From: LBasch

Drake C-Line, R$-C w/500, 250 filters, NB, xtra xtals,. T4XC, nearly new finals. MS-4 w/AC-4. All clean. $300 plus shipping.

Drake MN-2000 KW Antenna tuner. $150.

Icom IC-3210A, 2m/440 mobile. $250.

Alinco DJ-160 2m handheld. $125.

Kenwood TR-8300 mobile w/ ext. synthesizer. Clean and works well. $75.

Palomar Antenna Bridge., LN, $45.

Bencher paddle and MFJ-406 keyer. $50.

Microphones:
  Astatic D-103 $25.
  Shure 526T ampl. mike, $30.
  Astatic 575-M6 hand power mike, $25.

All of these items are in good, clean condition and have manuals. Reply by e-mail, please.

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 13:50:08 1994
Date: Thu, 8 Dec 1994 10:59:39 -0500 (EST)
From: "Roberta J. Barmore" <rbarmore@IndyNet.indy.net>
Subject: HRO for sale REVISION!
Message-Id: <Pine.3.89.9412081055.A6138-0100000@IndyNet>

Hello again!

This is embarrassing; my friend's HRO, offered here yesterday for $150, is an HRO 50T, *not* a 60.

The mistake is mine; when I spoke to her this morning, she set me straight. >blush<

Three fellows expressed interested yesterday, and I have their letters saved, in order; if you're still interested, let me know.

73,
--Bobbi

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 20:12:45 1994
Message-Id: <m0rFqN4-000KmtC@aupair.cs.athabascau.ca>
Date: Thu, 8 Dec 94 14:27 MST
From: tech@cs.athabascau.ca (Richard Loken)
Subject: is bakelite repairable

I got a telegraph key No. 9 (for a 19 set) this weekend and upon removing the key from its leg iron enclosure found the bakelite base to be broken in three places. Old age? A rough ride sometime in its 50yr life?

I would like to repair the base if possible, can this be done? China weld perhaps?

If that doesn't work, I will build a new base out of plexiglass. Since I am not using it mounted in the original leg iron it will never be authentic anyway.

Anybody want an empty but otherwise well preserved Canadian No. 9 leg iron.

CQ (the Contester's Quarterly) has an artical on British/Canadian WWII surplus gear this month. A tad fluffy but a pleasant read none the less.

Richard Loken VE6BSV, Systems Programmer - VMS   : "...underneath those
Athabasca University   : tuques we wear, our heads
Athabasca, Alberta Canada   : are naked!"
** tech@cs.athabascau.ca **   :   - Aurthor Black

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 18:00:10 1994
Date: Thu, 8 Dec 94 12:10:45 -0600
From: rbiddle@madvax.mo.ti.com (Richard Biddle)
Message-Id: <9412081810.AA03296@MadVax.mo.ti.com>

Subject: Linseed oil warning

After reading all of the deep chemistry :) discussed here, I thought I would throw by $.02 in regarding the use of linseed oil.

I find linseed oil to be very good for restorations, but it can be very very dangerous. If you throw your used rags into the trash and let sit for a while, you could find yourself with a very nasty fire due to spontaneous combustion. Really bad news if the trash can is in the house or shop. Even rags which have been laundered can i cause a fire.

I have always been told to dispose of the rags ASAP by putting them into a sealed metal can, such as an empty old paint can, with a good dousing of water. Then pitch it into the dumpster away from the house.

I'm sure this is redundant to many of you, but the new folks may not have heard about this. Linseed oil is in a lot of refinishing products so the culprit may not be just the pure form.

Only the radios should glow in the dark, not the whole shack :)

Richard
KB%5WLH

rbiddle@madvax.mo.ti.com

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 20:54:40 1994
Message-Id: <9412082311.AA18605@keen.austin.ibm.com>
Subject: Mail Viruses
Date: Thu, 08 Dec 94 17:11:33 -0600
From: "R.G. Keen" <keen@austin.ibm.com>

This kind of mail virus may be a hoax in TCPIP communications, but not in VM systems. There is at least one well-documented case where a mail virus actually did close down IBM's internal email system, albeit briefly, by re-sending itself to every ID in each person's alias files. I believe this particular door has been closed, but it can happen, in some systems.

R.G.

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 21:14:10 1994
Message-Id: <MAILQUEUE-101.941208191251.448@vilas.uwex.edu>
From: "Terry O'Laughlin" <OLAUGHLIN@vilas.uwex.edu>
Date: 8 Dec 94 19:12:51 CDT
Subject: Mil List

I can't seem to stuff this list through the net. It's now a 54K file and will continue to grow. Anyone know the intricacies of Pegasus and/or the net? How can I distribute this thing without cutting off BAer's who don't have FTP access.

73s   Terry O'   WB9GVB

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 23:42:25 1994
Date: Thu, 8 Dec 1994 21:04:28 -0500
From: Ornitz_Barry <ornitz@emn.com>
Message-Id: <199412090204.AA39129@emngw1.emn.com>
Subject: MSDS Information on Selected Solvents and Moth Repellants

The following is selected information from MSDS's on a number of common solvents found in paint, and on napthalene and paradichlorobenzene.

A few common abbreviations are:

LEL	Lower Explosive Limit
UEL	Upper Explosive Limit
TWA	Time Weighted Average
ACGIH	Amer. Council Gov. & Indust. Hygienists
STEL	Short Term Exposure Limit
LD50	Dosage at which 50% of the test animals died

Cyclohexane*   100   110-82-7   900702

See Section VI-A for information on exposure limits.
*Hazardous chemical as defined by OSHA, 29 CFR 1910.1200.

-- Flash Point: -18C (0F), Method Used: Tag Closed Cup.
-- Autoignition temperature: 246C (475F); Method Used: ASTM E 659-78.
-- Flammable Limits: LEL 1.18% (at 25C 77F)
UEL 7.9% (at 25C 77F).
-- Electrical resistivity: 2 X 10^15 Ohm-cm.

A. EXPOSURE LIMITS

-- Threshold Limit Value (TLV): 300 ppm-TWA, ACGIH, 1987-88.
-- OSHA Permissible Exposure Limit (PEL): 300 ppm-TWA.
-- A NIOSH industrial hygiene analytical method is available. (2)

D. TOXICITY DATA

Test	Species	Result (3)	Acute Toxicity Classification (4)

Acute oral LD50	Rat	8 to 39 mL/kg	Practically nontoxic
Acute oral LD50	Mouse	1.30 g/kg	
Dermal LD100	Rabbit	>180.2 g/kg	

Massive applications to the rabbit skin have shown microscopic changes in the liver and kidneys. (3)

Product Name: Distilled Heptane and Toluene

2. COMPOSITION/INFORMATION ON INGREDIENTS

Weight % - Component - (CAS Registry No.)

5-95	heptane (000142-82-5)
5-95	toluene (000108-88-3)
0-5	xylene (001330-20-7)
0-2	methyl alcohol (000067-56-1)
0-2	ethyl acetate (000141-78-6)
0-2	isopropyl alcohol (000067-63-0)
0-2	acetone (000067-64-1)
0-1	propyl acetate (000109-60-4)
0-1	water (007732-18-5)

Exposure Limits:

ACGIH Threshold Limit Value (TLV):

heptane: 400 ppm TWA; 500 ppm STEL
toluene: 50 ppm TWA; skin
xylene: 100 ppm TWA; 150 ppm STEL
methyl alcohol: 200 ppm TWA; 250 ppm STEL; skin
ethyl acetate: 400 ppm TWA
isopropyl alcohol: 400 ppm TWA; 500 ppm STEL
acetone: 750 ppm TWA; 1000 ppm STEL
propyl acetate: 200 ppm TWA; 250 ppm STEL

An ACGIH Biological Exposure Index (BEI) is available for toluene, xylene methyl alcohol.

OSHA (USA) Permissible Exposure Limit (PEL, 1989 Table Z-1-A values or section-specific standards):

heptane: 400 ppm TWA; 500 ppm STEL
toluene: 100 ppm TWA; 150 ppm STEL
xylene: 100 ppm TWA; 150 ppm STEL
methyl alcohol: 200 ppm TWA; 250 ppm STEL; skin
ethyl acetate: 400 ppm TWA

isopropyl alcohol: 400 ppm TWA; 500 ppm STEL
acetone: 750 ppm TWA; 1000 ppm STEL
propyl acetate: 200 ppm TWA; 250 ppm STEL

Acute Toxicity Data:

Oral LD-50: not available
Inhalation LC-50: not available
Dermal LD-50: not available

Product Name: "EASTMAN" Heptane, Toluene, Ethyl Acetate Mixture

2. COMPOSITION/INFORMATION ON INGREDIENTS

Weight % - Component - (CAS Registry No.)

10-50	heptane (000142-82-5)
0-40	toluene (000108-88-3)
20-90	ethyl acetate (000141-78-6)

Exposure Limits:

ACGIH Threshold Limit Value (TLV):

heptane: 400 ppm TWA; 500 ppm STEL
ethyl acetate: 400 ppm TWA
toluene: 50 ppm TWA; skin

An ACGIH Biological Exposure Index (BEI) is available for toluene.

OSHA (USA) Permissible Exposure Limit (PEL, 1989 Table Z-1-A values or section-specific standards):

heptane: 400 ppm TWA; 500 ppm STEL
ethyl acetate: 400 ppm TWA
toluene: 100 ppm TWA; 150 ppm STEL

Product Name: "EASTMAN" Toluene

Weight % - Component - (CAS Registry No.)

100	toluene (000108-88-3)

Exposure Limits:

ACGIH Threshold Limit Value (TLV): 50 ppm TWA; skin

An ACGIH Biological Exposure Index (BEI) is available for toluene

OSHA (USA) Permissible Exposure Limit (PEL, 1989 Table Z-1-A values or section-specific standards): 100 ppm TWA; 150 ppm STEL

- Flash Point (Tag closed cup): 5C (41F)
- Lower Explosive Limit at 26C (79F): 1.22 volume %
- Upper Explosive Limit at 68C (154F): 6.7 volume %
- Autoignition Temperature (ASTM D 2155): 568C (1054F)
- Sensitivity to Mechanical Impact: insensitive at 100 kg-cm
- Sensitivity to Static Discharge: Material may accumulate a static charge which could act as an ignition source.

Acute Toxicity Data:

Oral LD-50 (rat): 6600 mg/kg
Oral LD-50 (rat): 7000 mg/kg
Oral LD-50 (rat): 7400 mg/kg
Inhalation LC-50 (rat): 8000 ppm/4 hour(s)
Dermal LD-50 (rabbit): 14 g/kg
Skin irritation (rabbit): slight to moderate
Repeated skin application (rabbit): slight to moderate irritation
Skin sensitization (human): none
Eye irritation (rabbit): slight to strong
Eye irritation (human): slight

Definitions for the following section(s): LOEL = lowest-observed-effect level, NOAEL = no observed-adverse-effect level, NOEL = no-observed-effect level.

Subchronic Toxicity Data: Oral study (193 days, rat): NOEL = 590 mg/kg/day (highest dose tested)

Carcinogenicity Data: Inhalation study (24 months, rat): NOEL = 300 ppm (highest concentration tested)

Chronic Toxicity Data: Inhalation study (24 months, rat): NOEL = 300 ppm (highest concentration tested)

Xylene, Recovered

A. COMPONENTS:	Weight %	CAS Reg No	Kodak No
Xylene* **	>95	1330-20-7	900460
Toluene* **	<5	108-88-3	900325
Heptane*	<5	142-82-5	902215

-- Flash Point: <25C (77F), Method Used: Tag Closed Cup.
-- Flammable Limits (xylene): LEL 1.1% (at 100C 212F)
UEL 6.4-6.6% (at 100C 212F).

A. EXPOSURE LIMITS

Exposure Limits in ppm for Principal Hazardous Components

	ACGIH-(1988-89)		OSHA		
Component	TLV-TWA	TLV-STEL	PEL-TWA	Ceiling	Peak
Xylene	100	150	100	No	No
Toluene	100	150	200	300	500
Heptane	400	500	500	No	No

-- NIOSH industrial hygiene analytical methods are available for the above components. (2)

D. TOXICITY DATA

Toxicity data for the principal component, xylene, are:

Test	Species	Result	Acute Toxicity Classification (3)
Acute oral LD50	Rat	4.3 g/kg (4)	Slightly toxic
Inhalation LC50	Rat	6700 ppm for 4 h(5)	Slightly toxic
Dermal LD50	Rabbit	14 ml/kg (6)	Practically nontoxic
Skin irritation	Rabbit	Moderate (6)	
Repeated skin application	Rabbit	Moderate exacerbation (7)	
Eye irritation	Rabbit	Slight to moderate(7)	

Human subjects exposed to 200 ppm xylene reported irritation of the eyes, nose, and throat. (5)

Inhalation Study: Rats and rabbits were exposed to airborne concentrations of 690 ppm, 8hours/day, 6 days/week, for 130 exposures, or 1150 ppm, 8 hours/day, 6 days/week, for 55 exposures. There was a decrease in red amd white cell counts and an increase in platelet counts in high dose rabbits. Low dose showed normal hematology.(5)

SECTION 1. - - - - - - - - - CHEMICAL IDENTIFICATION- - - - - - - - - -

PRODUCT #: H9379 NAME: N-HEXANE

```
    FLASHPOINT    -10 F
                -  23C
    AUTOIGNITION TEMPERATURE:   482 F           249C
    UPPER EXPLOSION LEVEL:                 7.7%
    LOWER EXPLOSION LEVEL:                 1.2%

RTECS NO: MN9275000
    HEXANE
IRRITATION DATA
    EYE-RBT 10 MG MLD                             TXAPA9 55,501,80
TOXICITY DATA
    ORL-RAT LD50:28710 MG/KG                      TXAPA9 19,699,71

REVIEWS, STANDARDS, AND REGULATIONS
    ACGIH TLV-TWA 50 PPM                          85INA8 6,753,91
    MSHA STANDARD-AIR:TWA 500 PPM (1800 MG/M3)
     DTLVS* 3,126,71
    OSHA PEL:8H TWA 500 PPM (1800 MG/M3)
     FEREAC 54,2923,89
    OSHA PEL FINAL:8H TWA 50 PPM (180 MG/M3)
     FEREAC 54,2923,89
    NIOSH REL TO HEXANE-AIR:10H TWA 50 PPM
     NIOSH* DHHS #92-100,92

----------------------------------------------------------------------------

    PRODUCT #: M2886       NAME: METHYL ETHYL KETONE

    FLASHPOINT     26 F
                -   3C
    AUTOIGNITION TEMPERATURE:   960 F           515C
    UPPER EXPLOSION LEVEL:                 10.1%
    LOWER EXPLOSION LEVEL:                 1.8%

TOXICITY DATA
    ORL-RAT LD50:2737 MG/KG                       TXAPA9 19,699,71
    IHL-RAT LC50:23500 MG/M3/8H                   AIHAAP 20,364,59
    IPR-RAT LD50:607 MG/KG                        ENVRAL 40,411,86
    ORL-MUS LD50:4050 MG/KG                       TOLED5 30,13,86
    IHL-MUS LC50:40 GM/M3/2H                      85GMAT -,83,82
    IPR-MUS LD50:616 MG/KG                        SCCUR* -,6,61
    SKN-RBT LD50:6480 MG/KG                       SHELL* MSDS-5390-4
    IHL-MAM LC50:38 GM/M3                         GISAAA 51(5),61,86

REVIEWS, STANDARDS, AND REGULATIONS
    ACGIH TLV-TWA 200 PPM; STEL 300 PPM           85INA8 6,1002,91
    EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION
     FEREAC 54,7740,89
    MSHA STANDARD-AIR:TWA 200 PPM (590 MG/M3)
     DTLVS* 3,29,71
    OSHA PEL:8H TWA 200 PPM (590 MG/M3)
     FEREAC 54,2923,89
    OSHA PEL FINAL:8H TWA 200 PPM (590 MG/M3);STEL 300 PPM (885 MG/M3)
     FEREAC 54,2923,89
    NIOSH REL TO METHYL ETHYL KETONE-AIR:10H TWA 200 PPM;STEL 300 PPM
     NIOSH* DHHS #92-100,92

---------------------------------------------------------------------------

    PRODUCT #: 76871       NAME: PENTANE

    FLASHPOINT    -57 F
                -  49C
    AUTOIGNITION TEMPERATURE:   500 F           259C
    UPPER EXPLOSION LEVEL:                  ~8.3%
    LOWER EXPLOSION LEVEL:                  1.4%

RTECS NO: RZ9450000
    PENTANE
TOXICITY DATA
    IHL-RAT LC50:364 GM/M3/4H                     GTPZAB 32(10),23,88
    IVN-MUS LD50:446 MG/KG                        JPMSAE 67,566,78
    ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
    (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
    COMPLETE INFORMATION.

REVIEWS, STANDARDS, AND REGULATIONS
    ACGIH TLV-TWA 600 PPM; STEL 750 PPM           85INA8 6,1185,91
    MSHA STANDARD-AIR:TWA 500 PPM (1475 MG/M3)
     DTLVS* 3,200,71
    OSHA PEL:8H TWA 1000 PPM (2950 MG/M3)
     FEREAC 54,2923,89
    OSHA PEL FINAL:8H TWA 600 PPM (1800 MG/M3);STEL 750 PPM (2250 MG/M3)
     FEREAC 54,2923,89
    NIOSH REL TO PENTANE-AIR:10H TWA 120 PPM;CL 610 PPM/15M
     NIOSH* DHHS #92-100,92

----------------------------------------------------------------------------
SECTION 1. - - - - - - - - - CHEMICAL IDENTIFICATION- - - - - - - - - -
    PRODUCT #: 70210       NAME: NAPHTHALENE
SECTION 2. - - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - - -
    CAS #:91-20-3
    MF: C10H8
SYNONYMS
    ALBOCARBON * CAMPHOR TAR * MIGHTY 150 * MIGHTY RD1 * MOTH BALLS *
    MOTH FLAKES * NAFTALEN (POLISH) * NAPHTHALENE (ACGIH,DOT,OSHA) *
```

NAPHTHALENE, CRUDE OR REFINED (UN1334) (DOT) * NAPHTHALENE, MOLTEN (UN2304) (DOT) * NAPHTHALIN * NAPHTHALINE * NAPHTHENE * NCI-C52904 * RCRA WASTE NUMBER U165 * TAR CAMPHOR * UN1334 (DOT) * UN2304 (DOT) * WHITE TAR *

FLASHPOINT	174 F 78C	
AUTOIGNITION TEMPERATURE:	978 F	525C
UPPER EXPLOSION LEVEL:		5.9%
LOWER EXPLOSION LEVEL:		0.9%

TOXICITY DATA

ORL-CHD LDLO:100 MG/KG	28ZRAQ -,228,60
UNR-HMN LDLO:29 MG/KG	YKYUA6 31,1499,80
UNR-MAN LDLO:74 MG/KG	85DCAI 2,73,70
ORL-RAT LD50:490 MG/KG	85GMAT -,89,82
SKN-RAT LD50:>2500 MG/KG	TXAPA9 14,515,69
ORL-MUS LD50:533 MG/KG	FAATDF 4,406,84
IPR-MUS LD50:150 MG/KG	NTIS** AD691-490
SCU-MUS LD50:969 MG/KG	TOIZAG 20,772,73
IVN-MUS LD50:100 MG/KG	CSLNX* NX#00203
SKN-RBT LD50:>20 GM/KG	NTIS** AD-A062-138
ORL-GPG LD50:1200 MG/KG	GISAAA 47(11),78,82

REVIEWS, STANDARDS, AND REGULATIONS

ACGIH TLV-TWA 10 PPM; STEL 15 PPM (SKIN) 85INA8 6,1063,91
EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION
FEREAC 54,7740,89
MSHA STANDARD-AIR:TWA 10 PPM (50 MG/M3)
DTLVS* 3,177,71
OSHA PEL:8H TWA 10 PPM (50 MG/M3)
FEREAC 54,2923,89
OSHA PEL FINAL:8H TWA 10 PPM (50 MG/M3);STEL 15 PPM (75 MG/M3)
FEREAC 54,2923,89
NIOSH REL TO NAPHTHALENE-AIR:10H TWA 10 PPM;STEL 15 PPM
NIOSH* DHHS #92-100,92
NTP CARCINOGENESIS STUDIES (INHALATION);SOME EVIDENCE:MOUSE
NTPTR* NTP-TR-410,92
NTP CARCINOGENESIS STUDIES;SELECTED, JANUARY 1994

SECTION 1. - - - - - - - - - - CHEMICAL IDENTIFICATION- - - - - - - - - -
PRODUCT #: 35370 NAME: 1,4-DICHLOROBENZENE
SECTION 2. - - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - - -
CAS #:106-46-7
MF: C6H4CL2

SYNONYMS

P-CHLOROPHENYL CHLORIDE * P-DICHLOORBENZEEN (DUTCH) * 1,4-DICHLOORBENZEEN (DUTCH) * P-DICHLORBENZOL (GERMAN) * 1,4-DICHLORBENZOL (GERMAN) * DI-CHLORICIDE * P-DICHLOROBENZENE * 1,4-DICHLOROBENZENE * P-DICHLOROBENZENE (ACGIH,DOT,OSHA) * P-DICHLOROBENZOL * P-DICLOROBENZENE (ITALIAN) * 1,4-DICLOROBENZENE (ITALIAN) * EVOLA * GLOBOL * NCI-C54955 * PARACIDE * PARA CRYSTALS * PARADI * PARADICHLORBENZOL (GERMAN) * PARADICHLOROBENZENE * PARADICHLOROBENZOL * PARADOW * PARAMOTH * PARANUGGETS * PARAZENE * PDB * PDCB * PERSIA-PERAZOL * RCRA WASTE NUMBER U070 * RCRA WASTE NUMBER U071 * RCRA WASTE NUMBER U072 * SANTOCHLOR * UN1592 (DOT) *

FLASHPOINT	150 F 65C

INCOMPATIBILITIES

OXIDIZING AGENTS
ALUMINUM
AND ITS ALLOYS.

RTECS NO: CZ4550000
BENZENE, P-DICHLORO-

IRRITATION DATA

EYE-HMN 80 PPM	AMIHAB 14,138,56

TOXICITY DATA

ORL-HMN LDLO:857 MG/KG	34ZIAG -,210,69
UNR-HMN LDLO:357 MG/KG	YKYUA6 31,1499,80
UNR-MAN LDLO:221 MG/KG	85DCAI 2,73,70
ORL-RAT LD50:500 MG/KG	WRPCA2 9,119,70
SKN-RAT LD50:>6 GM/KG	FAATDF 7,299,86
IPR-RAT LD50:2562 MG/KG	JAPMA8 38,124,49
ORL-MUS LD50:2950 MG/KG	GUCHAZ 6,183,73
IPR-MUS LD50:2 GM/KG	MUTAEX 2,111,87
SCU-MUS LD50:5145 MG/KG	TOIZAG 20,772,73
ORL-RBT LD50:2830 MG/KG	YKYUA6 29,453,78
SKN-RBT LD50:>2 GM/KG	SPEADM 78-1,18,78
ORL-MAM LD50:2600 MG/KG	GTPZAB 32(10),25,88
IHL-MAM LC50:12 GM/M3	GTPZAB 32(10),25,88

REVIEWS, STANDARDS, AND REGULATIONS

ACGIH TLV-TWA 75 PPM; STEL 110 PPM	85INA8 6,410,91
IARC CANCER REVIEW:ANIMAL SUFFICIENT EVIDENCE	IMSUDL 7,192,87
IARC CANCER REVIEW:HUMAN INADEQUATE EVIDENCE	IMEMDT 7,231,74
IARC CANCER REVIEW:ANIMAL INADEQUATE EVIDENCE	IMEMDT 7,231,74
IARC CANCER REVIEW:HUMAN INADEQUATE EVIDENCE	IMEMDT 29,213,82
IARC CANCER REVIEW:ANIMAL INADEQUATE EVIDENCE	IMEMDT 29,213,82
IARC CANCER REVIEW:GROUP 2B	IMSUDL 7,192,87

EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION

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     FEREAC 54,7740,89
    MSHA STANDARD-AIR:TWA 75 PPM (450 MG/M3)
     DTLVS* 3,77,71
    OSHA PEL:8H TWA 75 PPM (450 MG/M3)
     FEREAC 54,2923,89
    OSHA PEL FINAL:8H TWA 75 PPM (450 MG/M3);STEL 110 PPM (675 MG/M3)
     FEREAC 54,2923,89
    NIOSH REL TO P-DICHLOROBENZENE-AIR:CA (1.7 PPM LOQ)
     NIOSH* DHHS #92-100,92
    NTP 7TH ANNUAL REPORT ON CARCINOGENS, 1992 : ANTICIPATED TO BE
     CARCINOGEN
-----------------------------------------------------------------------------

        ==========
         |      |                  Dr. Barry L. Ornitz   WA4VZQ
         |      |         Eastman Chemical Company Research Laboratories
         |      |
        / ###### \             Process Analyzer Research Laboratory
       /  #       \       Custom Online Instrumentation for Manufacturing
      /   #####    \
     /    #         \                Eastman Chemical Company
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   / Eastman Chemical \             Kingsport, TN 37662 - 5150
  /      Company       \          615/229-4904, FAX 615/229-4558
 |Research  Laboratories|                 ornitz@emn.com
  \____________________/
```

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 03:21:23 1994
Date: Wed, 7 Dec 94 19:53:16 HST
From: jeffrey@math.hawaii.edu (Jeffrey Herman)
Message-Id: <9412080553.AA24956@kahuna.math.hawaii.edu>
Subject: Re: My virus

Gang,

I wanted to say I'm sorry for jumping the gun on my bacteria - er, virus warning. It was passed down to me by my superiors, and I wanted all my friends here on BA and over on QRP to be notified. It's apparently a hoax and that warning has become a sort of `chain letter' which is a no-no on the net-net.

Solder fumes have clouded my judgement...

Jeff NH6IL

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 03:41:04 1994

From: ab4el@Cybernetics.NET (Stephen Modena)
Message-Id: <9412080555.AA13026@Cybernetics.NET>
Subject: Please take a moment to help out...
Date: Thu, 8 Dec 1994 00:55:14 -0500 (EST)

Please help me build a current database of active subscribers
to this boatanchors list.

Send a email to: ab4el@Cybernetics.NET

Make the subject: BA OK

You could put your name, call and email address in the message...
or just include your usual .signature...
or just send me an empty message with just the BA OK subject and I'll
take the info from the header.

Thank you.

--
73/Steve Modena/AB4EL   ab4el@Cybernetics.NET
Archivist/Digest-er for BOATANCHORS at SunSITE.unc.edu   :^)

From owner-boatanchors@gnu.ai.mit.edu Fri Dec 9 00:34:30 1994
From: TOM.A.ADAMS@mail.admin.wisc.edu
Subject: Re. BA Brainwashing
Date: Thu, 08 Dec 94 21:44 CST
Message-Id: <EC8L4445.EC8L4457@mail.admin.wisc.edu>

to: boatanchors@gnu.ai.mit.edu

Greetings, Troops.

The messages re. reasons for collecting / operating "heavy metal" have been most enlightening. Reading each one I found myself saying "Right On, Brother / Sister!". I can more than identify with every motivation.

I've personally got the bug bad, and have had it for YEARS.

In college in the '70s I was a history major (a good start for one who venerates that which is old). At the time I was saddened by the fact that there were no museums dedicated to old technology (Smithsonian Air & Space museum was about the only exception at that time). Nowadays we're seeing a change to that situation; there is a broadcasting equipment museum in Chicago, and I understand there is a computer museum in New York, complete with IBM 360s and a real Eniac. Technomuseums are beginning to spring up like mushrooms, and why not? We owe a lot to old technology, and, as we see here almost every day, the knowledge of how it worked is still valuable to a lot of people and institutions.

This stuff is a part of what makes society what it is now. A lot of it wrote history.

In my case tho, I spend 40 hours a week surrounded by the latest hi tech gizmos, including robotics, digital video, and satellite uplinking gear. After all this stuff, gimme a 40 year old BA ANYTIME!!!

Don't worry about folks snickering over your preference for BAs; hell, the thundering herd has been doing that to ME since the '60s, but I've been able to keep a ham station on the air a whole lot more cheaply than most people with the judicious use of BAs. Also, I've never had to send a piece of gear back to the factory! Too bad old gear has suddenly become the "in" thing (Tiffany lamps should have told me SOMETHING...); the market prices have gone nuts as a result (the days of $10 SX-99s is long gone!).

Oh sure, I've got some new stuff too; a lot of it is really slick. On the other hand the BAs rule in my shack.

I think I might have been born in the wrong part of the century; I still use a slide rule, I shave with a straight razor, and frequently I'm prone to carry a real fountain pen. Talk about a throwback to simpler times!

BTW, for the REAL O.T.s around here, I've got a piece of "gear" in the shack that's a GENUINE blast from the past.

On the wall, I have an autographed, nude photo of Sally Rand (with her flashing fan), circa 1933 Chicago World's Fair!!!

Betcha nobody else on the echo's got one of THOSE!!! ;-)

73's,

Tom "Mr. T." Adams, K9TA

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 05:50:36 1994
Date: Thu, 8 Dec 1994 10:20:37 +0200
From: "PMD G.SIFAKIS" <pmdsif@isoft.intranet.gr>
Message-Id: <9412080820.AA24065@asterix.isoft.intranet.gr>
Subject: Re: Re: Re: BA Brainwashing

Dan writes:
> I just wish I could my youngins'interested......I put up the "SEGA!!"
> but they just went to the CD-ROM....[!-(...Maybe the GRANDchildren??

Join the club, Dan. After Nintendo/GameBoy/TurboExpress/SuperNintendo/ PCgames, now my boys are getting a CD-ROM for Christmas. You should however see their eyes last night when for the first time I powered on the ART-13, uncovered the bottom and got the Autotune mechanism running! I think these things stick to childrens' minds and come back when they get tired with the latest/greatest gadgets.

George   SV0KA

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 22:54:15 1994
Date: Thu, 8 Dec 1994 21:01:55 -0500
From: Ornitz_Barry <ornitz@emn.com>
Message-Id: <199412090201.AA30420@emngw1.emn.com>
Subject: Safety [was RE: Mildew Killing]

In message <9412062236.AA28522@batdd6.pica.army.mil> Kalman Laudon, AA2UQ, takes me to task for suggesting spraying paradichlorobenzene in solution to kill mildew. While there are certainly hazards associated with this, I find his post to show extreme chemophobia and a lack of facts on the true risks involved. I certainly do not want to turn the BOATANCHORS mailing list into a flamefest, but I feel his points do need to be addressed factually. Readers of this list can then make their own opinions. For those solely into collecting or using hollow-state electronics but not into other aspects of restoration, I apologize for wasting your time. If you are, however, involved with cleaning, repairing, painting, polishing, etc. with your boatanchors, you might find this discussion interesting. I will try to not quote excessively but unfortunately some is required.

>I am glad to see that there are some people who know something about
>chemistry! I myself switched majors Junior year into Chemical Engineering,
>so that pretty well disqualifies me from the standpoint of most chemists
>:). However, a career in manufacturing engineering, process development,
>and industrial safety in process plants have taught me a healthy respect
>for these matters. Basically, my hair stood on end as I read the
>original technique in Mr. Ornitz's message!

By way of introduction, I too am an engineer. It would be difficult to say exactly what kind since my work involves chemical, electrical, and mechanical engineering. My PhD is in chemical engineering, but I minored in electrical engineering and have more training in EE than most MSEE's. I work in the research laboratories of Eastman Chemical Company (formerly part of Kodak but now separate) in a group that designs and builds custom online process instrumentation. Design of electrical instruments for use in hazardous areas via purging techniques, explosion-proof construction, or intrinsic safety is something I do routinely. I have built numerous instrumentation systems for the measurement and detection of poisonous and hazardous substances so I am quite familiar with industrial safety and hygiene, and chemical, flammability, and toxicity risks. Over the years, I have seen the public become more and more chemophobic. I generally attributed this to the lack of science education in today's school system. Coming from someone whose posting site is listed as the Army Armament Research Development and Engineering Center, and someone with a chemical engineering background, I find Laudon's comments particularly distressing as he obviously has a technical background.

>I have been out of that field for quite a few years; however, I seem to
>remember that benzene, and most substituted benzene compounds were pretty
>nicely carcinogenic!   I guess p-dichlorobenzene must not be, for some
>reason, if it is still in use as a urinal deodorant, which obviously
>evaporates! But the idea of dissolving it in hexane (isn't that also
>an extremely noxious solvent?), and then, spraying it at/around/near/
>outside your home, sounds like an excellent way to absorb a huge quantity
>compared to what you would get in 10 years of daily use of the
>restroom at work! Also, to use these dangerous solvents is a recipe for
>horrible injury or death from burns. Even storage of such materials is
>extremely dangerous, even in a few ounce quantities.

Yes, benzene is listed by most authorities as a carcinogen. Restrictions on benzene use are numerous. However, paradichlorobenzene is still readily available to the public - even if it is a SUSPECTED carcinogen. Of course, benzene is quite readily available to the public too - but not in pure form. Every time you fill your automobile with gasoline, you are being exposed to large quantities of benzene and other aromatics (the chemical name for compounds having a cyclic benzene-like structure). Should you be careful with gasoline? Of course! But I would bet Laudon probably has more than a few ounces around his home and automobile.

Hexane is likewise not terribly toxic compared to most other common organic solvents like paint thinners, spot removers, or even the materials in WD-40 lubricant. The flammability of hexane is similar too.

I suggest that anyone restoring boatanchors carefully read the ingredients of a can of spray paint the next time they consider using spray enamel to match the maroon of an old Johnson. With the restrictions on chlorofluorocarbons, spray paint propellants are now generally alkanes like propane or butane. The paint itself generally contains solvents like toluene and xylene (aromatics), hexane and heptane (alkanes and also real nasty materials with triboelectric charging and electrostatic discharges), methyl-ethyl and methyl-isobutyl ketones, and a host of other flammable and poisonous solvents. Can you safely spray oil and enamel paints at home? Most people can if they take care. Of course there will always be stupid people: those who smoke around solvents and when gassing their car, or those who spray paint near electric or gas heaters or in enclosed places without adequate ventilation.

>The advice, "Be ready for the unexpected", is IMHO inappropriate for
>the home hobbyist, however skilled. There is NO way to be prepared
>for this kind of fire hazard at home. NOBODY has the kind of protective

>clothing, fume hoods, respirators, and MOST IMPORTANTLY, trained or
>aware ASSISTANCE that would be REQUIRED in any legal industrial
>environment. Do you have someone standing by, with a fire extinguisher,
>fire blanket, etc. as you do your boatanchor or other restoration work?
>Working alone in industry can be an immediate ticket to either the
>morgue, or to being fired for cause.

Spraying paradichlorobenzene in pentane-hexane mixtures outdoors has about the same risks as spraying a can of Krylon outdoors. Using automotive spray paints, with some of the exotic polymerization chemistries found today in aftermarket paints, is just as hazardous from a flammability viewpoint and likely more so from a chemical exposure view point. I would consider spraying my mildew killing solution outdoors with good ventilation no more risky than my wife frying chicken on the stove. Of course she has a fire extinguisher in her kitchen, and I keep several more around the house: in the hamshack, in my garage, and even in the bedroom! :-) Of course I know to avoid skin contact with the para and the solvents but then I try to avoid skin contact with gasoline, furniture polish, antifreeze and paint too. READ THE INSTRUCTIONS and follow them - be they mine on killing mildew or those on the paint can.

My advice on being ready for the unexpected is to insure that someone think about the risks involved first, to minimize these risks to an acceptable level, and to plan a course of action ahead of time in the event an accident happens. Panic causes more injuries than many accidents do.

[While speaking of panic and fire extinguishers, how many boatanchor fans know how to use a fire extinguisher properly, much less have one handy? I have to go through training every few years with a real (pretty large) fire and different types of extinguishers. It is amazing what a small dry chemical extinguisher can quench. Everyone should have several scattered around their home. It is also worth the $10 or so to demonstrate the proper use of an extinguisher to your family.]

>In addition to long-term carcinogenic or toxic effects, and explosion/
>fire hazards, we must watch out for immediate medical reactions, like
>allergic or shock responses, if we get a whiff or splash on our skin
>the concentrated solvent and/or herbicidal reagent. A sudden, severe
>asthma and/or cardiopulmonary attack or allergy can mean silent keydom
>for you, and widowhood for the XYL (or if your insurance is paid up,
>merry widowhood :( ). Even for a young, otherwise healthy person.

Anaphylactic shock is not too likely with most common solvents although other acute exposure effects may be seen. I have lots of allergies so I worry about this myself. However most severe allergens are proteins in the 500 to 5000 molecular weight range. Many solvents can cause a sensitization reaction in some people, such that repeated exposure can cause worse problems than simple contact. The reactions are generally local (rash, itching, etc.) rather than systemic, but the risk is certainly worth considering, especially with persons having known sensitivities to other materials. Pesticides and herbicides are far more likely to have such associated allergy risks than common household chemicals.

>Sorry to be a fear-monger (they used to hate me for that where I used to
>work, but that was what I was paid for). Any comments?   The chemists
>are now invited to jump in with the facts.

I too hope some other chemically trained people will comment. Still, I _DO_ consider Laudon's message to be somewhat in the "fear-monger" category. In this vein, let me ask the other boatanchorites about how they handle other risks in this hobby....

Soldering. Do you use lead mixtures? What about rosin fumes (terpenes)?

Capacitors. Does any of your older gear contain oil filled-capacitors? How do you know if they contain PCB oils? Do you replace all oil-filled capacitors and dispose of the old ones in an environmentally safe way? And what kind of oil do you have in your Heath Cantenna? What about the very ancient wet-slug electrolytic capacitors with their chemical electrolytes.

Tar. Ever overheat a potted transformer? That tar is filled with carcinogens. Heating tar also releases hydrogen sulfide, a known neurotoxin.

Phenolics. What is that odor when phenolic plastics overheat? Phenol and formaldehyde... and you talk about hazardous!

Mercury. What about mercury wetted relays and rectifier tubes? Or mercury batteries in gear such as the URC-4 air-sea rescue walkie-talkies?

Phosphors, vacuum tube emitters, and gaseous voltage regulators. Most phosphors are pretty dangerous as are the oxides like thoria. VR tubes usually contain some radioactive materials to insure proper ionization. My R-390A manuals talk about radiation hazards associated with VR tubes.

Radium. R-390A and other luminous dial meters come to mind.

Cadmium, the plating on many screws and chassis parts. Getting the corrosion off an old chassis may expose you to some nasty stuff. What is that nice fluffy white coating seen on many older chassis? (Usually tin oxide.)

Glues. Epoxy and cyanoacrylates can be rather nasty. What about polystyrene Q-dope with its flammability and solvents.

Asbestos. Do you have any radios so old that they contain asbestos insulation? What about masonite (asbestos composite) insulators?

Plasticizers. What is that sticky, gooey stuff coating that old vinyl wire?

Many plasticizers contain phthalates (chemical compounds with aromatic containing structures).

Selenium. Have you ever blown a selenium rectifier and sniffed that awful garlic-like smell? Look up its toxicity sometime.

Have you emptied the drip pan for the grid-leak lately? Do you lift the BC-610 with your knees or back? Have you checked the structural integrity of the foundation of your hamshack? :-) Well it IS getting deep!

My point is that this hobby certainly has risks associated with it in addition to the obvious ones like electrocution. Should these risks stop you from enjoying your hobby? Probably not, but you should at least give them some educated thought and minimize them whenever possible. Are chemicals automatically always bad? Maybe if you are "politically correct" but not if you really understand them.

All of the above risks are quite real; some are certainly more important than others. Good ventilation can eliminate most of the risks of soldering. PCB filled capacitors, if they are not leaking and not stressed electrically, are probably best left alone. Avoid tar where you can; if you smell rotten eggs, the characteristic odor of hydrogen sulfide, get to fresh air. Don't overheat phenolics and be especially careful if you use phenol containing chemicals to remove wire enamel before soldering (GC Strip-X). Metallic mercury is fairly safe but mercury vapor is not. Mercury spills are a real mess to clean up (contact me by email if this is a problem for anyone). Don't break vacuum tubes, but be careful if you do. Do not open radium-dialed meters. Wear protective gloves and appropriate dust protection when cleaning metal chassis. Follow the instructions on glues carefully. Masonite and other asbestos insulation is fairly safe UNLESS it is becoming fibrous and the fibers can become airborne during handling. Plasticizers are generally not too toxic, but it is certainly a good idea to wash carefully after handling them. It is an excellent idea to replace all selenium rectifiers with silicon diodes as a safety precaution. Watch out for the lower voltage drop and internal resistance. Leaving a selenium stack in place (but out of the circuit) is OK for aesthetic purposes. Drain the drip pans regularly and lift with your knees - if you can lift a BC-610! ;-)

Laudon's point about working alone is well taken - but more for electrical hazards than chemical ones for boatanchorites. Do other family members know the fundamentals of CPR and how to safely remove someone from a live electrical source? Do you, as a boatanchorist, set a proper safety example for your family or potential boatanchor converts? [My wife now wears safety glasses and steel-toed boots when mowing the lawn.]

To conclude, I do believe my mildew treatment can be done safely if you follow the precautions I outlined. It is my opinion that the flammability and toxicity hazards are not significantly different from purchased spray paint.

But don't just take my word for it, or Laudon's either for that matter. Do your own checking and make your own decision with supporting evidence.

To help the readers with this, I will follow this post with another one with excerpts from a number of Material and Safety Data Sheets for various solvents, napthalene, and paradichlorobenzene. I have tried to include the flammability properties and U.S. toxicity standards where this information is available. I can email the full MSDS information on these specific materials to anyone who requests it, but these are rather long and I prefer to avoid this if possible. Please do not ask me for MSDS information on other materials either.

Once again, I apologize for this message being so long. I hope the list readers do not consider it a flame. Safety is an important part of our hobby, and I hope the readers will learn something from reading this. Risks should not be taken lightly, but they should not be avoided at all costs either. I certainly hate to see chemophobia grow among the uninformed. I miss the days when Gilbert made excellent chemistry sets for children along with their Erector Sets. Try to buy one today. If the chemophobics have their way, students will never learn chemistry - just a programmer's simplistic approximation in virtual reality.

```
                                   73, Barry  WA4VZQ

        ==========
         |      |                    Dr. Barry L. Ornitz   WA4VZQ
         |      |            Eastman Chemical Company Research Laboratories
         |      |
        / ###### \               Process Analyzer Research Laboratory
       /  #       \       Online Instrumentation for Automatic Process Control
      /   #####    \
     /    #         \                  Eastman Chemical Company
    /     ######     \               P.O. Box 1972,  Eastman Road
   / Eastman Chemical \               Kingsport, TN 37662 - 5150
  /      Company       \            615/229-4904, FAX 615/229-4558
 |Research  Laboratories|                   ornitz@emn.com
  \____________________/
```

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 11:14:58 1994
Date: Thu, 8 Dec 1994 08:13:43 -0500
From: Michael Crestohl <mc@shore.net>
Message-Id: <199412081313.AA01126@shore.shore.net>
Subject: Something for the Season!!!!

Hi Boat-anchorites!!!

Although this has absolutely nothing to do with the subject at hand, I thought it might appeal to the technical nature of the group.

IS THERE A SANTA CLAUS?

As a result of an overwhelming lack of requests, and with research help from that renown scientific journal SPY magazine (January, 1990) - the author is pleased to present this scientific inquiry into Santa Claus.

1) No known species of reindeer can fly. BUT there are 300,000 species of living organisms yet to be classified, and while most of these are insects and germs, this does not COMPLETELY rule out flying reindeer which only Santa has ever seen.

2) There are 2 billion children (persons under 18) in the world. BUT since Santa doesn't (appear to) handle the Muslim, Hindu, Jewish and Buddhist children, that reduces the workload to 15% of the total - 378 million according to Population Reference Bureau. At an average (census) rate of 3.5 children per household, that's 91.8 million homes. One presumes there's at least one good child in each.

3) Santa has 31 hours of Christmas to work with, thanks to the different time zones and the rotation of the earth, assuming he travels east to west (which seems logical). This works out to 822.6 visits per second. This is to say that for each Christian household with good children, Santa has 1/1000th of a second to park, hop out of the sleigh, jump down the chimney, fill the stockings, distribute the remaining presents under the tree, eat whatever snacks have been left, get back up the chimney, get back into the sleigh and move on to the next house. Assuming that each of these 91.8 million stops are evenly distributed around the earth (which, of course, we know to be false but for the purposes of our calculations we will accept), we are now talking about .78 miles per household, a total trip of 75-1/2 million miles, not counting stops to do what most of us must do at least once every 31 hours, plus feeding and etc.

This means that Santa's sleigh is moving at 650 miles per second, 3,000 times the speed of sound. For purposes of comparison, the fastest man-made vehicle on earth, the Ulysses space probe, moves at a poky 27.4 miles per second - a conventional reindeer can run, tops, 15 miles per hour.

4) The payload on the sleigh adds another interesting element. Assuming that each child gets nothing more than a medium-sized lego set (2 pounds), the sleigh is carrying 321,300 tons, not counting Santa, who is invariably described as overweight. On land, conventional reindeer can pull no more than 300 pounds. Even granting that "flying reindeer" (see point #1) could pull TEN TIMES the normal amount, we cannot do the job with eight, or even nine. We need 214,200 reindeer. This increases the payload - not even counting the weight of the sleigh - to 353,430 tons. Again, for comparison - this is four times the weight of the Queen Elizabeth.

5) 353,000 tons traveling at 650 miles per second creates enormous air resistance - this will heat the reindeer up in the same fashion as spacecraft re-entering the earth's atmosphere. The lead pair of reindeer will absorb 14.3 QUINTILLION joules of energy. Per second. Each. In short, they will burst into flame almost instantaneously, exposing the reindeer behind them, and create deafening sonic booms in their wake. The entire reindeer team will be vaporized within 4.26 thousandths of a second. Santa, meanwhile, will be subjected to centrifugal forces 17,500.06 times greater than gravity. A 250-pound Santa (which seems ludicrously slim) would be pinned to the back of his sleigh by 4,315,015 pounds of force.

In conclusion - If Santa ever DID deliver presents on Christmas Eve, he's toast now.

Hope it's not too early to wish one and all a Very Merry Christmas!!!

73,

Michael and Cynthia Crestohl
Nahant .....by the sea.....in Massachusetts!

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 18:26:23 1994
Message-Id: <9412081633.AA4356@hqsmtp.ops.3com.com>
From: Joe Reda/HQ/3Com <Joe_Reda@3mail.3com.com>
Date: 8 Dec 94 8:33:29 EDT
Subject: Re: Something for the Season!!!!

(sound of Joe chuckling) This posting was the best humor stuff here since that thread about how many 12AU7s it would take to replicate an 80486. We should have a few more diversions like this from time to time . . .

Season's Greetings to all . . . and may Santa bring you that (fill in the blank)
you've been wanting!!

\\Joe KC6TXU

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 20:36:36 1994
Date: Thu, 8 Dec 1994 14:21:04 -0800 (PST)
From: paul Veltman <veltman@netcom.com>
Subject: Re: Something for the Season!!!!
Message-Id: <Pine.3.89.9412081443.A17697-0100000@netcom7>

On Thu, 8 Dec 1994, Michael Crestohl wrote:

> Hi Boat-anchorites!!!
>
> Although this has absolutely nothing to do with the subject at hand, I
> thought it might appeal to the technical nature of the group.
>
> IS THERE A SANTA CLAUS?
>
>
> This means that Santa's sleigh is moving at 650 miles per second, 3,000
> times the speed of sound. For purposes of comparison, the fastest man-
> made vehicle on earth, the Ulysses space probe, moves at a poky 27.4 miles
> per second - a conventional reindeer can run, tops, 15 miles per hour.
>

So ---> that's why nobody's ever seen Santa! He's one fast Son of a B----!

Paul WA6OKQ

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 22:38:56 1994
Date: Fri, 9 Dec 94 01:31:40 GMT
From: "Hugh D. Stegman" <driver8@red-eft.la.ca.us>
Message-Id: <9412090131.AA16527@red-eft.la.ca.us>
Subject: Re: Something for the Season!!!!

Once upon a time a little NV6H without a c/s yet asked Santa for a KW-1. Really. I suspect that this is what started it all. In any event, Santa has been given his pension and replaced by a self-propagating memetic construct that uses human brains for its hosts. It tends to be passed from parents to children, permanently altering chemical patterns in their memory cells in a way that is not understood.

In other words, Santa is every bit as real as the Good Times Virus Warning. Yes, Virginia, there is a Santa Claus.

No, I did not get the KW-1.

Hugh NV6H

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 12:18:07 1994
Date: 08 Dec 94 09:14:15 EST
From: don merz <71333.144@COMPUSERVE.COM>
Subject: SX-11, Geloso, misc...
Message-Id: <941208141414_71333.144_DHQ76-17@CompuServe.COM>

```
 For Sale

 CONTACT: Don Merz, N3RHT: 47 Hazel Drive, Pittsburgh, PA 15228
          412-234-8819.

 LATEST ADDITIONS

 These items are the latest additions to a lengthy list that is posted on
 Compuserve in HAMNET LIBRARY 10 under the file name RADIOS.TXT.

 Hallicrafters SX-11 receiver. 1936-37 vintage general coverage radio (.535-
  40mhz) with crystal filter, mechanical bandspread and tuning eye. Probably
  among the most collectible Hallicrafters radios today. This one is in VERY
  nice shape. The front panel is very good to excellent. The case is very good.
  There are no mods that I can see. The dial (often a problem with 30's
  Hallicrafters sets) is excellent. And it works (some cap replacement has
  been done but a full restoration is necessary). Rare radio in rare
  condition. $319
 Geloso G-209-R ham bands receiver, circa 1959. Covers 80-10 meters. One of
  very few Italian amateur radio products ever made. Front panel is very
  good or better. Blue/grey hammertone cabinet is good. Perforated grill
  on top and chassis have some rust spots. All original knobs, paint
  and meter (glass cracked). Dial face is clear and logo sparkles.
  Unworking. $209
 Eisemann Brochure; Audio Frequency Amplifying Transformers, small. I'm
  guessing late-teens or early 20's. $1
 Sams Tube Substitution Handbook, Vol2. 2, 1961. $4
 Brochure: "Radio, How To Make And Operate." 1922, Goldsmith Publishing
  Company, Cleveland, Ohio. 4" by 5" booklet (60 pages) covering crystal set
  and 1-tube "audion" construction. Really nice. $29
 "Tuning in On A New World" brochure published by Condensite to promote
  their Celoran line of panel materials. It's an introductory kind of
  How-To brochure covering 1 to 5 tube set construction. With schematics.
  Good condition. About 1924. $16
 Sears Silvertone Owner's Manual with the following catchy title: "10 tube
  Superheterodyne With Push-Button Tuning, Recorder and Automatic Record
  Changer." No model number is given. In original mailing envelope dated
  February 22, 1945. $6

 RADIO-RELATED item (hey, it probably had a radio in it...): MD Midget TD
  Driver's Handbook. Owner's manual. Near-mint. 6th edition. $19



From owner-boatanchors@gnu.ai.mit.edu  Thu Dec  8 16:56:21 1994
Message-Id: <9412081746.AA10363@wrdis01.robins.af.mil>
Date: Thu, 8 Dec 94 12:46:55 -0500
```

From: lakeith@wrdis01.robins.af.mil (Larry Keith)
Subject: Re: SX-11, Geloso, misc...

>
> RADIO-RELATED item (hey, it probably had a radio in it...): MD Midget TD
> Driver's Handbook. Owner's manual. Near-mint. 6th edition. $19
>

Sounds like a sporty support for a mobile installation to me. In my younger days, I would have given my eyeteeth for one of those and maybe a set of Elmac's to mount in the passenger side.. Don't think you could get them mounted on the drivers side of that hump.. Then, one could mount a Webster Bandspanner on the rear bumper (I think those things had bumpers!), find a young lady to go for a Sunday afternoon drive out toward Folly Beach, and enjoy the world...

Now, I don't have my eyeteeth anyway.. And, I sold my last MG about 5 years ago so that I could buy a pickup truck to go hamfesting. But, the boatanchors remain, by golly!

Thanks for the memory, Don!

73,

Larry, KQ4BY

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 19:04:43 1994
Message-Id: <9412081943.AA21361@kropotkin.gnu.ai.mit.edu>
Date: Thu, 08 Dec 94 13:38:15 CST
From: "Stephen M. Linscott" <LINSCOT@ricevm1.rice.edu>
Subject: SX-115

I've repaired the VFO in an SX-115 for a friend, and like the receiver so much that we are working on a trade. What is one of these worth? It is cosmetically very good, and electrically excellent. He also has an HT-32B that I am just starting on. Does anyone have a meter movement for the HT-32B? It appears to be a three-terminal meter that measures relative output, with some compression circuitry on it. The meter case and scale are in great shape, but the movement is trashed. I would appreciate any leads.

tnx es 73 de Steve

```
****************************************
*    Steve Linscott     W5EGP          *
*    IS User Services                  *
*    Rice University   Houston, Texas  *
****************************************
```

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 19:57:42 1994

Message-Id: <9412081636.AA4388@hqsmtp.ops.3com.com>
From: Joe Reda/HQ/3Com <Joe_Reda@3mail.3com.com>
Date: 8 Dec 94 8:36:01 EDT
Subject: Tube Trivia - I

More tube trivia . . .

Who knows what the difference is between the 6T5 tuning eye
and the 6E5 (or 6G5 or 6U5)?

\\JR KC6TXU

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 16:34:34 1994
From: michael.moore@24stex.com
Message-Id: <9412080803.0BBLI00@24stex.com>
Date: Thu, 08 Dec 94 08:03:34 -0800
Subject: WANT TAPETONE CONV.

I am looking to buy a Tapetone six-meter converter. Either XC-51-N or
a XC-50 (51 preferred). Anybody out there got one lurking in the back
of their closet or in the garage somewhere?
Thanks, Mike K6SQJ

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 19:13:03 1994
From: azoth@netcom.com (Az0th)
Message-Id: <199412081935.OAA01267@netcom.netcom.com>
Subject: Welcome Roberta and HRO-60T
Date: Thu, 8 Dec 1994 14:35:42 -0500 (EST)

BoatAnchorites & BoatAnchorettes (mmm...BoatAnchor[i|et]tes?),

Welcome Roberta! A pfiner and more pfriendly crowd of accomplished and
aspiring pfarts and heavy metal pfondlers you'd be hard pressed to find,
anywhere outside of a museum. 'Fact, the accumulated wisdom and experience
of those virtually assembled here _is_ a sort of cyberspace museum, well
dedicated to things that glow warmly in the dark.

What kept you? };-]

Well, since your friend's HRO is a 50T and not a 60T, I feel obligated to
repeat my earlier offering of an HRO-60T, now in my posession. Daniel
Wright has graciously agreed to provide a new home for my HQ-170AC, thus
allowing me to indulge a long-postponed passion for Drakes. I'd hoped

to work some trading, but folks here are reluctant to give anything up!

The B-twins's arrived (and a fine set it is!) and a C-line is on the way, and I'm still trying to figure out how to make it all fit. So, if there's anybody here that would like to play on an HRO-60 for a while, I'd now stoop to taking cash money for it, say $125 and buyer pays shipping. This is about what I paid for it, less a new tube I installed to get it working on the upper bands. Includes A-B-C-D coil sets, minor back panel mods, all else in excellent condition, fully functional. Obviously, the shipping on a BA of this size can get pretty harsh, so a local pickup would be great. I'm in northern Virginia, and will probably be at the Richmond fest in January, if that makes a difference. I'm also looking for A and earlier 4-line Drakes (where have all the A-twins gone?) if somebody does want a trade, or an SW-4A.

Cheers & 73,
RF Buchanan

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 10:48:33 1994
Date: Thu, 8 Dec 1994 08:08:53 -0500
From: Michael Crestohl <mc@shore.net>
Message-Id: <199412081308.AA00893@shore.shore.net>
Subject: Welcome to new subscribers!!!

>On Tue, 6 Dec 1994, Roberta J. Barmore wrote:
>   So, here I am--hope I'm not in the way.   73,   --Bob   \\KB9GKX

Hello and welcome:

No one is "in the way" on this list!

It has to be the finest collection of ham radio misfits I've had the privilege to associate with!

I have been playing with this kind of equipment since 1966! Back then and into the early 1970s I used to drool at the thought of just being able to play with these great radios - never thinking I'd actually own any of them. My first non-military surplus radio was a Drake 2B with the accessory speaker and Q-multiplier. I worked many hours after school to pay for that puppy. Used it with a Johnson Viking Ranger and worked the world - 235 countries confirmed! Later on I acquired my dream radio - a Collins KWM2A (which I still have!)

Later on with the great proliferation of hamfests and flea markets I was able to get much more stuff - and it was at bargain-basement prices. No one wanted them! Now I have plenty of the great oldies, including a "Big John" (Viking 500), 75A4 with 3 filters, 75S3C and 51S1 and more. I always thought I was unlike the rest of the hams who were more into the newer radios, but in the last few years, with the arrival of ELECTRIC RADIO and now the BOATANCHORS LIST I see that I am not alone, but among kindred spirits who share my belief that ham radio is still a "hands-on" hobby that still requires an apprenticeship to enter. I am not totally against "no code" techs (rather they populate the bands than have greedy commencial interests like UPS grab them!), but I find little in common with them to talk about.

My wife (VE2QF) and I are privileged to be members of an excellent ham radio club here in the Boston area, the B.A.R.S. (Billerica Amateur Radio Society) and I'm pleased to report there are several Boatanchor enthusiasts in the Society. You can tell that because one heard lots of 75m yay-em terminology on the W1DC/RPT (147.120) and WA1HLR is welcome on it whenever he's in the area. Its highly amusing to hear a no-coder tell another he's PW (piss-weak) into the repeater.

But the BOATANCHORS-LIST gives my daily dose of boat-anchor talk which I look forward to very much. Also Roberta, there is a LOT of knowledge and exertise out there and I have found that the fine folks are happy to share it. The "signal-to-noise ratio" on this mailing list is MUCH LOWER than any other newsgroup or mailing list I can think if---and it isn't even moderated.

So, don't worry about getting in the way - we're always glad to welcome newcomers whose only requirement is a genuine interest in the great old radios of the past.

73,

Michael, KH6KD/W1 (also VE2XZ)
mc@shore.net

In beautiful Nahant - by the sea.....in Massachusetts!

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 23:20:17 1994
From: mirage!pamars@uhura.neoucom.EDU (P.A.Marshall)
Message-Id: <9412081704.AA04726@mirage>
Subject: What is a RBA-7
Date: Thu, 8 Dec 94 12:04:27 EST

Just wondering what is known about this VLF set.
Is it a regerative rec'vr? Tube line up?

Al Marshall   "Real Radios Glow in the Dark"   almarshall@acm.org

As nightfall does not come at once, neither does oppression. In both instances, there is a twilight when everything remains seemingly unchanged. And it is in such twilight that we all must be most aware of change in the

air--however slight--lest we become unwitting victims of the darkness.
Justice William O. Douglas

From owner-boatanchors@gnu.ai.mit.edu Thu Dec 8 13:58:21 1994
Message-Id: <9412081528.AA18471@loki.hi.com>
Date: Thu, 8 Dec 1994 10:25:16 -0400
From: tonyr@hi.com (Tony Rodriguez) (by way of steve@hi.com (Steve Byan))
Subject: [comp.security.unix] Re: reported e-mail virus ***IS A HOAX***

------- Start of forwarded message -------

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             U.S. DOE's Computer Incident Advisory Capability
           ___  __ __    _     ___           __  __ __   __   __
          /       |     /_\   /       |\ |  /  \   |    |_   /_
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Number 94-04   December 6, 1994

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 ------------------- A - T - T - E - N - T - I - O - N -------------------
|  CIAC is available 24-hours a day via its two skypage numbers.  To use  |
|  this service, dial 1-800-759-7243.  The PIN numbers are: 8550070 (for  |
|  the CIAC duty person) and 8550074 (for the CIAC manager).  Please keep |
|  these numbers handy.                                                   |
 -------------------------------------------------------------------------
```

Welcome to the fourth issue of CIAC Notes! This is a special edition to clear up recent reports of a "good times" virus-hoax. Let us know if you have topics you would like addressed or have feedback on what is useful and what is not. Please contact the editor, Allan L. Van Lehn, CIAC, 510-422-8193 or send E-mail to ciac@llnl.gov.

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  $ Reference to any specific commercial product does not necessarily   $
  $ constitute or imply its endorsement, recommendation or favoring by  $
  $ CIAC, the University of California, or the United States Government.$
  $-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$-$
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THE "Good Times" VIRUS IS AN URBAN LEGEND

In the early part of December, CIAC started to receive information requests about a supposed "virus" which could be contracted via America OnLine, simply by reading a message. The following is the message that CIAC received:

```
 ---------------------------------------------------------------------------
| Here is some important information. Beware of a file called Goodtimes.    |
|                                                                           |
|  Happy Chanukah everyone, and be careful out there. There is a virus on   |
| America Online being sent by E-Mail.  If you get anything called "Good    |
| Times", DON'T read it or download it.  It is a virus that will erase your |
| hard drive.  Forward this to all your friends.  It may help them a lot.   |
 ---------------------------------------------------------------------------
```

THIS IS A HOAX. Upon investigation, CIAC has determined that this message originated from both a user of America Online and a student at a university at approximately the same time, and it was meant to be a hoax.

CIAC has also seen other variations of this hoax, the main one is that any electronic mail message with the subject line of "xxx-1" will infect your computer.

This rumor has been spreading very widely. This spread is due mainly to the fact that many people have seen a message with "Good Times" in the header. They delete the message without reading it, thus believing that they have saved themselves from being attacked. These first-hand reports give a false sense of credibility to the alert message.

There has been one confirmation of a person who received a message with "xxx-1" in the header, but an empty message body. Then, (in a panic, because he had heard the alert), he checked his PC for viruses (the first time he checked his machine in months) and found a pre-existing virus on his machine. He incorrectly came to the conclusion that the E-mail message gave him the virus (this particular virus could NOT POSSIBLY have spread via an E-mail message). This person then spread his alert.

As of this date, there are no known viruses which can infect merely through reading a mail message. For a virus to spread some program must be executed. Reading a mail message does not execute the mail message. Yes, Trojans have been found as executable attachments to mail messages, the most notorious being the IBM VM Christmas Card Trojan of 1987, also the TERM MODULE Worm (reference CIAC Bulletin B-7) and the GAME2 MODULE Worm (CIAC Bulletin B-12). But this is not the case for this particular "virus" alert.

If you encounter this message being distributed on any mailing lists, simply ignore it or send a follow-up message stating that this is a false rumor.

Karyn Pichnarczyk
CIAC Team
ciac@llnl.gov

- ------------------------------

Contacting CIAC

If you require additional assistance or wish to report a vulnerability, call

CIAC at 510-422-8193, fax messages to 510-423-8002 or send E-mail to ciac@llnl.gov. For emergencies and off-hour assistance, call 1-800-SKY-PAGE (759-7243) and enter PIN number 8550070 (primary) or 8550074 (secondary). The CIAC Duty Officer, a rotating responsibility, carries the primary skypager. The Project Leader carries the secondary skypager. If you are unable to contact CIAC via phone, please use the skypage system.

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End of CIAC Notes Number 94-04 94_12_06
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- --

Ted Lemon mellon@vix.com
+1 415 477 5045

Fight to preserve your freedom to program: Join the League for Programming Freedom! For info, contact lpf@uunet.uu.net.

------- End of forwarded message -------